

# Hellersen • Insight

The magazine of the  
Sportklinik Hellersen

—  
01.2025

Free for  
you to take  
away!



SPECIAL  
SPINAL SURGERY

Bye  
wheelchair!  
Sportklinik experts

AN EXPERT INTERVIEW  
WITH DR. VOLKER STOLL

## Last resort for your own knee

How a leg axis correction can help to preserve  
the knee joint for as long as possible



# Stronger together.

## Your health in the best hands.

Pain in the musculoskeletal system? Problems walking or moving your arms? Our specialists at the Medizinischen Versorgungszentrum of the Sportklinik Hellersen are here for you. We offer a wide range of services in the fields of orthopedics, neurosurgery, trauma surgery, and anesthesiology.

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As our patient, you are our focus. Our specialists take plenty of time to provide a thorough diagnosis and tailor your treatment to your individual needs. Thanks to our direct connection to the Sportklinik Hellersen, inpatient follow-up treatment can be provided quickly and efficiently at any time upon request.

# Editorial

**Dirk Burghaus**  
**Chairman of the Board Sportklinik Hellersen**

Technological innovations, an increasing shortage of specialists and growing global competition are presenting the healthcare sector with major challenges. But instead of letting these developments slow us down, we are moving forward with determination - with a clear vision and international partnerships that are helping to shape the future of medicine.

One pioneering example is the recently concluded cooperation with Emirates International Hospital in Abu Dhabi. This strategic alliance shows that excellent medicine knows no borders. It creates new perspectives - for patients who benefit from state-of-the-art care, for specialists who want to develop internationally and for the entire healthcare industry, which experiences sustainable progress through the global exchange of knowledge.

We are shaping the future of medicine not only through international cooperation, but also through the targeted use of innovative technologies. As a pioneer in North Rhine-Westphalia, we are setting new standards here: we were the first hospital in the region to introduce the VELYST™ Robotic Assisted Solution from Johnson & Johnson MedTech Orthopaedics (DePuy Synthes) - a pioneering technology that takes the implantation of knee endoprotheses to a new level.

In addition to advanced innovations, we also address exciting medical topics: Dr. Markus Leyh, new Head of Shoulder, Elbow, Knee Surgery and Traumatology, explains in an expert interview the most common diseases of the acromioclavicular joint - from wear and tear to fusion - and presents modern treatment options. Dr. Volker Stoll, Head of Knee Surgery and Sports Traumatology, also provides interesting insights into leg axis correction and explains how this procedure can help to preserve the knee joint and reduce discomfort.

We will also provide you with impressive insights into our day-to-day work at the clinic. The #Team-Physio shows how individually tailored therapy approaches have a positive influence on the healing process. We would also like to tell you about the patient story of Jan Plomann: A former, passionate martial artist who struggled for years with severe back problems and chronic pain. What began as a slight pulling sensation in his back developed into a major burden - to the point where he was confined to a wheelchair. Despite several operations, he finally found the help he urgently needed at the Sportklinik Hellersen and is now able to walk again.

We hope you enjoy reading this report.



Yours, Dirk Burghaus



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## Briefly noted

From our clinic world

### AWARD

## Stern magazine selects Sportklinik doctors



**Dr. Oliver Meier**  
Chief of Special  
Spine Surgery



**Dr. Ulrich Schneider**  
Chief of  
Sports Medicine

Dr. Ulrich Schneider, Chief of Sportmedizin Hellersen, and Dr. Oliver Meier, Chief of Deutsches Wirbelsäulen- und Skoliosezentrum, have once again been included in the prestigious list of star doctors. Dr. Ulrich Schneider was recognized for his outstanding achievements in sports medicine, while Dr. Oliver Meier was honoured for his exceptional expertise in spinal surgery. With innovative methods and in-depth specialist knowledge, he sets new standards in the surgical treatment of complex spinal disorders. These awards not only underline the high level of medical expertise, but also the significant contribution they make to first-class patient care - characterized by modern, effective and individually tailored treatment approaches. ■



### AWARD

## Schmerzmedizin honored for the first time by FOCUS Gesundheit



Dr. Wolfgang Welke, Chief of Schmerzmedizin Hellersen, has been named TOP physician in the field of chronic pain by FOCUS Gesundheit magazine for the first time. The experienced pain physician relies on innovative therapy concepts to provide his patients with lasting pain relief. Dr. Ulrich Schneider, Chief of Sportmedizin Hellersen, was also honored in the field of sports medicine. Dr. Petra Scheffer, Chief Ästhetik Hellersen, received the award in the Botox & Filler category. These awards not only recognize the outstanding expertise of the doctors who received the award, but also their significant contribution to excellent patient care, which is characterized by the highest medical quality, innovative approaches and individually tailored therapies. ■



## Briefly noted

From our clinic world

### AWARD

## Sportklinik Hellersen Top employer for the third time



Sportklinik Hellersen has been awarded the prestigious Top Company seal for the third time in a row. Since 2015, the rating platform kununu has been awarding this seal of approval to companies that have received particularly good ratings from their employees. Only five percent of all listed employers qualify for this award. With a recommendation rate of 64% and an average rating of 3.7 out of 5 points, Sportklinik Hellersen is well above the average for the health, social and care sector. Particularly noteworthy is the exceptionally strong team spirit, which is rated at 4.1 out of 5 points and reflects the positive working atmosphere at the clinic. The Top Company seal underlines the attractiveness of the specialist clinic as an employer and once again honors the commitment and team spirit of the entire workforce. ┐



### OFFICIAL HONOR

## Senate of Economy: Dirk Burghaus receives certificate of appointment



Dirk Burghaus, CEO of Sportklinik Hellersen, was appointed to the Senate of Economy in 2022. As part of the Senate's spring convention, the certificate of appointment was ceremoniously presented at the Federal Press Conference Center in Berlin. Among the guests was former Federal President Joachim Gauck. The appointment to the Senate of Economy honors entrepreneurial commitment that is characterized by social responsibility, sustainable action and value-based management. "For me, membership of the Senate is not only an honor, but also an obligation. At a time of major social and economic challenges, we need a business community that takes responsibility and plays an active role in shaping our future," says Dirk Burghaus.

The Senate of Economy brings together personalities from business, science and society and promotes dialog between politics and business. ┐

## Briefly noted

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From our clinic world

### PROFESSIONAL SPORTS

## Dr. Ulrich Schneider accompanies DFB referees to the Algarve

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At the beginning of the year, Bundesliga referees, assistant referees, and video assistant referees prepared intensively for the second half of the season at a training camp in the Portuguese Algarve. In addition to athletic and mental training, tactical workshops, and team building, medical care also played a crucial role.

Also present was our Chief of Sportmedizin Hellersen, Dr. Ulrich Schneider. He supported the elite referees with his expertise to optimize their resilience, regeneration, and injury prevention. Through individual consultations, targeted physiotherapy measures, and sports medicine analyses, he ensured that the referees were in the best possible physical condition to start the second half of the season. 

### ADOPTION


## Successor for wound management

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After more than 40 years of dedicated service, #TeamHellersen bids farewell to Martina Schaldach as she enters her well-deserved retirement. Since starting at the former Klinik für Sportverletzte (Clinic for Sports Injuries) on October 1, 1980, she has enriched the Sportklinik Hellersen with her expertise and passion. As an ICW wound expert, she has played a key role in shaping the quality of care since 2006.

Her connection to the specialist clinic is not only professional, but also personal: she met her husband Wolfgang here when she was a patient herself in 1981 after an accident – and he was starting his job as a new nurse. They worked side by side for decades, arriving at work together and finishing their shifts together.

Martina Schaldach will be succeeded by Marina Fuderholz, who successfully completed her further training at the beginning of 2023. 





## Insight

From our clinic world



# Clinic of the future: digital consultations now available



Sportklinik Hellersen and MVZ Hellersen cooperate with  
Digitale Facharzt- und Gesundheitszentrum in Olpe

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Hellersen Insight

Sportklinik Hellersen and its affiliated medical care center are expanding their medical services through a groundbreaking cooperation with the Digitale Facharzt- und Gesundheitszentrum in Olpe. In the future, patients will be able to contact the center digitally for orthopedics, trauma surgery, and neurosurgery.

"Digital services are indispensable in today's world. Many patients travel long distances to receive specialized medical care. Our goal is therefore to establish a supplement for our patients as quickly as possible and offer them high-quality digital care. We will achieve this through our cooperation with the Digitale Facharzt- und Gesundheitszentrum," explains Dirk Burghaus, CEO of Sportklinik Hellersen and managing director of MVZ an der Sportklinik Hellersen GmbH.

This means a considerable relief for patients: if no physical examination is necessary for the consultation, the appointment can take place digitally, saving patients considerable travel time in some cases. This applies, for example, to MRI consultations.

Unlike video consultations from home, patients at the specialist center in Olpe benefit from comprehensive on-site care. Medical assistants perform essential examinations such as blood pressure measurements or blood sampling and transmit the results directly to the attending physician or a

laboratory.

"With the DFGZ, we want to offer a solution to the shortage of doctors, especially in rural areas. But we also want to save patients long journeys to specialists. It makes no sense for a patient to travel a long way to see a specialist to talk about their findings for ten minutes," says Stefan Spieren, operator of the Digitale Facharzt- und Gesundheitszentrum and a registered specialist in general medicine and general surgery in Wenden.

To ensure the integration of this digital service into the Sportklinik Hellersen, extensive organizational and system preparations were made in advance. The digital consultation is to be firmly established in the range of services offered by the MVZ Hellersen and offer patients a modern, efficient, and location-independent alternative to traditional specialist appointments. If necessary, patients can also be referred directly to the MVZ or to the special consultation hours at the Sportklinik Hellersen. Following a short positive test phase of the processes, an expansion of the digital offering is firmly planned as part of the strategic orientation. ■



## Insight

guest contribution

# Innovative, digital, patient-focused

## The Digitale Facharzt- und Gesundheitszentrum in Olpe

**T**he Digitale Facharzt- und Gesundheitszentrum (DFGZ) in Olpe, led by specialists Julia and Stefan Spieren, has been offering an innovative solution for better medical care, especially in rural areas, since September 2024. Through a modern combination of telemedicine and practical on-site services, the center provides efficient and accessible care.

Follow-up care, check-ups, and discussions of findings can be conducted digitally, while essential examinations are carried out in the accessible premises. The data collected is transmitted directly to the treating specialists. This results in comprehensive, patient-oriented care that eliminates long travel times and improves access to specialist expertise. “With the DFGZ, we have created a solution that helps with care and improves access to specialist expertise,” emphasizes Stefan Spieren, specialist in general medicine and general surgery.

### KI-Avatar „Charlie“ – support through artificial intelligence

A special highlight at the DFGZ is the AI avatar “Charlie,” who welcomes patients and optimizes



practice processes. In the future, he will also discuss selected laboratory findings to reduce waiting times—but personal consultations with doctors will remain an integral part of patient care. Digital solutions such as “Charlie” relieve the burden on specialist staff and improve patient care without replacing personal contact. The center also has state-of-the-art technology for digital consultations and hybrid events. Specially equipped treatment rooms with video conferencing technology and high-resolution cameras enable authentic communication between patients and specialists. In addition to modern patient care, the technical equipment also provides a platform for professional exchange in the form of specialist lectures.

### Digital support for all age groups

The DFGZ has received positive feedback from many patients, particularly due to the simple and intuitive use of its digital services. The straightforward appointment booking process, quick access to specialists,



## The Spieren couple is shaping the future of healthcare

and direct transmission of findings are all beneficial to patients. In addition, a medical assistant is always on site to provide personal support if needed. Patients who feel unsure about using digital services receive comprehensive support through digital training and information events, ensuring that everyone feels comfortable using the system.

### Patient-friendly procedures

Intelligent digital medical history taking simplifies the process by allowing patients to enter their health information from home. This saves time and improves the quality of diagnosis. A tablet guides patients through the entire process, opens treatment rooms, starts video consultations, and provides specific information. Digital consultations offer parents and caregivers flexible appointments that can be easily coordinated with family, work, and caregiving responsibilities. "Telemedicine provides enormous relief, especially for caregivers," notes Julia Spieren.



Julia and Stefan Spieren, specialists in general medicine, are shaping the future of patient care with innovative digital solutions. Since 2015, they have been running the state-of-the-art Spieren & Kollegen family practice in Wenden-Hünsborn and consistently driving forward the digital transformation in healthcare. Another project is the Digitale

Facharzt- und Gesundheitszentrum (DFGZ) in Olpe, which combines telemedicine with digitally supported diagnostics to improve access to specialists, especially in rural areas. In addition to their professional commitments, they are parents of four children and successfully juggle family and career. ■

### Forward-looking vision

With the DFGZ, Julia and Stefan Spieren are setting new standards in modern patient care. Their goal is to use digital technologies in a targeted manner to improve medical care, reduce waiting times, and offer patients comfortable, high-quality care. Personal contact always remains a central component of the concept. "We didn't become doctors to sit in front of a screen all day," Julia and Stefan Spieren emphasize together. "Digitalization should help us have more time for our patients. It's not about doing everything online, but about digitizing what works well online in a meaningful way," explains Stefan Spieren.

#### Kontakt



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## Facts

The Sportklinik in figures



**13**

Medical  
specialist depart-  
ments under one

Sportklinik Hellersen provides comprehensive care for injuries to the knee, hand, shoulder, elbow, hip, spine or foot and ankle. The range of services is rounded off by plastic and aesthetic surgery, sports medicine and special pain medicine.

**8.000**

Inpatient  
treatments  
per year

**40.000**

outpatients  
patients  
per year



**1.400**

Pain  
patients  
per year



**2.400**

back pain pa-  
tients  
per year



**4.500**

Joint  
surgery  
per year



**567**

Mitarbeiterinnen  
und Mitarbeiter

\*including subsidiaries

Stand February 2025



**1.030**

Meniskus-  
operationen  
per Jahr



**2.000**

Knee  
surgery  
per year



**850**

Knee and  
hip prostheses  
per year



**1.000**

Shoulder  
surgery  
per year



## patient feedback

Your opinion is important to us!



"Very competent doctors. The pre-surgery information was excellent. The post-surgery consultation was just as good. I felt completely in good hands. I would like to highlight all the nurses and caregivers! They were extremely friendly and always had a smile on their faces. Really great staff! I would always return to this clinic for treatment! Thank you to everyone!"

Klinikbewertungen, March 2025

"Very friendly and understanding doctors and nurses. Good explanations in understandable conversations. High level of professional expertise."

Klinikbewertungen, November 2024

"Excellent treatment: arrived in the morning, had surgery, and was discharged in the afternoon! Great procedures, highly competent staff, and above all, no pain..."

Klinikbewertungen, November 2024

"Communication with the office, initial consultation and advice + surgery by Dr. Stoll, care in the hospital, surgery results after two months—everything was great. Highly recommended. For us, the long journey (almost 2 hours) was definitely worth it. Many thanks again to everyone involved."

Klinikbewertungen, 2024

"Had outpatient surgery today. I'm extremely satisfied and happy. Such friendly and kind staff, simply perfect. I would go back there anytime. The clinic and the staff are just great."

Google, November 2024

"Top hospital. Great staff. Here, you are still treated like a human being. Thanks to the whole team, especially Dr. Leyh for the great surgical result."

Google, September 2024

"(...) I am really glad that I ended up at the Sportklinik Hellersen Lüdenscheid – and I can recommend it with complete conviction. Thank you for everything – you really took away my fear of the operation."

Google, April 2025

"(...) Dr. Leyh is one of the most 'human' doctors I have ever had the pleasure of meeting. His manner toward his staff is exemplary. He is always friendly and helpful."

Google, September 2024

"In February 2024, I underwent surgery for a torn SL ligament in my right wrist. The operation was a complete success. I am very satisfied. My thanks go to Dr. Scheffer and her entire team."

Google, September 2024

"I was treated in a friendly and competent manner by everyone, from the chief physician Dr. Stoll to all the nursing and administrative staff.

They take their time and always treat you as an equal. There is no noticeable stress, time pressure or anything like that, although I'm sure it must be there.

They give patients the impression that "you're in good hands here."

Klinikbewertungen, January 2025

"The best hospital. I am very grateful."

Google, October 2024

We look forward to your reviews on Facebook, Google, Klinikbewertungen, or Jameda.

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Hellersen Insight



## In an interview with

Dirk Burghaus  
Chairman of the Board of Sportklinik Hellersen

A portrait of Dirk Burghaus, a middle-aged man with a beard, wearing a dark blue blazer over a light blue shirt. He is smiling slightly and looking towards the camera. The background is a soft, out-of-focus indoor setting.

Pioneer in global  
healthcare –  
Sportklinik Hellersen relies  
on strong partners worldwide

**I**n times of advancing technological developments, an urgent shortage of skilled workers, and increasing global competition in the healthcare sector, innovative solutions must transcend national borders. CEO Dirk Burghaus is actively addressing this challenge and, with Sportklinik Hellersen, is focusing on international partnerships to secure a sustainable future in the healthcare industry. In an interview with Hellersen Insight, he explains how collaborations open up new opportunities and shape medical cooperation in the long term.

**The Sportklinik Hellersen recently entered into an important partnership with the Emirates International Hospital in Abu Dhabi. How did this cooperation come about?**

*Dirk Burghaus: Our main goal is to ensure the best possible care for our patients. For this reason, we are convinced that we need to leave the “Germany bubble” and focus more on international partnerships. The United Arab Emirates in particular is playing a pioneering role in areas such as artificial intelligence and innovative medicine. We want to bring this knowledge to Germany and at the same time strengthen the international reputation of the Sportklinik Hellersen. We want to combine the high quality of German medicine and excellent medical training with the positive international opportunities available.*

Internationalization is a decisive factor in healthcare today. The Middle East region, especially the Emirates and Saudi Arabia, plays a central role in this. They are economically strong and already have close ties to Germany, both through skilled workers and through cooperation in the medical field. Our partnership in Abu Dhabi arose from direct discussions on site. We were looking for an experienced partner in the hospital sector and found it in Emirates International Hospital. Synergies quickly emerged, particularly in the fields of orthopedics and surgery, as our values in terms of medical quality and patient care were very similar. It was therefore a natural step to establish a long-term cooperation.

**What are the major differences between the healthcare systems in the Middle East, particularly in the United Arab Emirates, Saudi Arabia, and Germany?**

Dirk Burghaus: The numerous differences between the healthcare systems are particularly noteworthy here, especially the insurance system: Compulsory insurance is not yet universal in the Emirates, but it is being introduced gradually—this is currently an important issue in Saudi Arabia in particular. Looking to the future, comprehensive compulsory insurance is increasingly becoming a reality in the region.

Another key difference lies in the political prioritization of healthcare. In the United Arab Emirates, healthcare is at the top of every economic agenda. In Germany, on the other hand, the healthcare system is largely taken for granted and often given low political priority. There is still considerable room for improvement, while the United Arab Emirates, especially Saudi Arabia, are already much more advanced in this area. Healthcare is given much higher priority there.

**What challenges and opportunities does this partnership bring?**

Dirk Burghaus: Cultural differences are certainly a challenge. Whether it's working hours, models, or culture, there are some major differences here. A good example is job security, which exists in



Germany like in hardly any other country. This is exactly where our model comes in: Through the cooperation, medical professionals can work abroad under the umbrella of Sportklinik Hellersen while enjoying the security of a German employer.

This combination is highly valued by skilled workers and represents a significant advantage of our concept. Top medical professionals in particular are driven by the idea of developing internationally



and helping to shape medical progress. In recent months, we have received an increasing number of inquiries from internationally recognized physicians who have either already worked with us or are interested in collaborating with us. These medical professionals are specifically looking for an international work environment where they can further develop their expertise.

This naturally also benefits patients: At Sport-klinik Hellersen, we have always been committed to providing excellent medical care.

Our international orientation allows us to further expand the already high quality standards of our medical care—both here in Lüdenscheid and in the Middle East, where we are establishing our high standards. Despite our location disadvantage compared to large cities such as Hamburg or Berlin, this cooperation enables us to further expand our medical care and make it accessible to patients worldwide.

**The cooperation aims to establish a joint training strategy. What does this concept look like and what measures are being taken to counteract the shortage of skilled workers?**

Dirk Burghaus: We are currently working on becoming the first hospital in the world to train Arab medical specialists. Until now, specialist training has only been available in the 22 Arab countries that belong to the Arab Board of Health Specializations. This body coordinates training at numerous institutions in the region.

We are currently in the final stages of the audit process and expect to receive final approval in the second quarter of 2025. Implementation is expected to begin in the third and fourth quarters. This would make us the first healthcare facility in the world to train Arab medical specialists outside of Arab countries. This development opens up a significant opportunity for us, as medical specialists from the Arab world are keen to come to us. They are highly motivated and have a promising medical future. Ultimately, our focus is always on medical excellence and providing the best possible care and treatment for our patients worldwide.

**What does the dual specialist training mean for the career opportunities of the doctors and for Sportklinik Hellersen?**

Dirk Burghaus: Doctors who want to stay in Germany after their training are in high demand here and are welcomed with open arms. Our training program enables them to obtain both German and Arab specialist qualifications – a clear unique selling point. Without the approval of the Arab Board of Health Specializations and the combined training program at our clinic, doctors would have to complete two separate training courses to obtain this qualification.

Of course, there will also be specialists who return to their home countries. This is precisely where we come in: we want to establish a strong presence not only in Germany but also in the Emirates so that these highly trained doctors remain connected to us. This will not be possible in every case, but one thing is clear: those who train doctors and produce highly qualified medical professionals ultimately help shape standards and developments in the industry.

This way of thinking can perhaps be explained well with the following example: When a chief physician retires and can say, “I trained five new chief physicians during my career. That makes me proud!” That is not the standard for everyone today, but it is in line with our philosophy as a center for medical excellence. In the long term, we will be very successful because the best talent will come to us on their own.

**How do you deal with potential language barriers that arise from the training cooperation?**

Dirk Burghaus: The doctors who come to us usually speak English fluently. However, a basic requirement for their training is that they also speak German to ensure smooth communication with patients. German language skills are therefore essential, and German courses are an integral part of our training. Doctors from the region are particularly motivated to learn the language because they know how important it is for their professional future and for communicating with patients.

We make sure that language skills are tested before

training begins to ensure that communication with patients works well, as this is a decisive factor in successful treatment.

**A key goal of the collaboration is to introduce innovative concepts in patient care. What new approaches are you planning to improve patient treatment and care?**

Dirk Burghaus: A key goal of our collaboration is to introduce innovative concepts in patient care to ensure first-class care for people worldwide. We want patients to benefit from the best medical services regardless of their location. Thanks to modern technologies such as video conferencing, teleconsultation, and AI-supported collaboration, we are already able to efficiently perform many aspects of medical care—with the exception, of course, of operations, which still require direct contact.

Our goal is to ensure that our medical professionals can provide optimal care both on site and remotely through regular exchange and cooperation. This enables us to establish an integrated care concept in Germany, Europe, and the Middle East, and to provide patients worldwide with first-class medical care.



**The new partnership between Sportklinik Hellersen and Emirates International Hospital in Abu Dhabi was celebrated at the opening ceremony..**





The Emirates International Hospital in Al Ain, Abu Dhabi, now proudly bears the logo of Sportklinik Hellersen – International: Hellersen Hospital.

**How do you rate technological progress in healthcare in the United Arab Emirates, particularly the use of AI and digital patient care compared to Germany? Where do you see room for improvement in this country?**

*Dirk Burghaus: The significant digital progress in the United Arab Emirates is enormous compared to Germany. When entering a doctor's office, the patient's fingerprint is scanned and the doctor immediately receives all health data – including from pharmacies. This means that the doctor knows, for example, if a patient has recently had wisdom tooth surgery and is taking painkillers, even if the patient forgets to mention it. This information is essential for providing comprehensive medical care. At the same time, data protection is very strictly enforced in the Emirates. This means that only the doctor has access to this data.*

In Germany, electronic patient records have been under discussion for over ten years. What is already reality in the United Arab Emirates is still in the planning stage here. And we're not even talking about AI, just electronic records – it's hard to understand why this hasn't been implemented yet.

The Emirates have a more advanced understanding of innovation than Germany, where “data protection hammer” often slows down implementation. Germany also has some catching up to do in terms of administration: doctors in the Emirates are more efficient because they have less bureaucracy and more time for patients.

Sportklinik Hellersen is also highly regarded and supported by industry, as we strive to participate in international projects. We are also very innovative in the field of digitalization and are on the verge of offering cross-border services such as telemedicine—from Lüdenscheid to Abu Dhabi—in an excellent system for making diagnoses.



## How will this partnership facilitate access to German treatment options for patients from the United Arab Emirates?

*Dirk Burghaus: It's quite simple: if a local doctor examines a patient and determines that complex surgery is necessary—for example, in the case of difficult scoliosis in spinal surgery—they contact our specialists in Lüdenscheid. In many cases, we then conduct a video consultation, during which the specialist assesses the patient in advance. Together with the patient, the doctors then decide whether it would be better to perform the operation in Germany. We then take care of all the organization and healthcare on site.*

After treatment in Germany, the patient remains under our care even after returning to the Emirates. The patient continues to have a contact person who is affiliated with the Sportklinik Hellersen and can provide post-operative care.

We are currently negotiating with Emirati health insurance companies to be recognized as an official hospital. This would allow insured patients to receive treatment directly at Sportklinik Hellersen without having to pay upfront—similar to health insurance in Germany. Billing would then be handled directly with the insurance company, which would simplify the process for everyone involved.

## In what direction is the Sportklinik Hellersen developing in the field of international healthcare, and are further collaborations planned?

*Dirk Burghaus: We want to leave the “Germany bubble” and look beyond our own horizons. That is why we are currently exploring partnerships with five renowned institutions in China, including universities and hospitals. China offers a completely different dimension in healthcare—with millions of patients every year, the scale there is considerably larger than in Germany. At the same time, there is growing interest in German medicine and in working with us. We are also in close contact with institutions in Saudi Arabia and Turkey to develop joint projects based on our successful model in the United Arab Emirates.*



## Hellersen Hospital stands for medicine without borders.

The Hellersen Hospital, the international branch of the Sportklinik Hellersen, combines German cutting-edge medicine with state-of-the-art medical technology and innovative treatment concepts. It stands for the highest quality of care, sustainable promotion of skilled workers, and close international cooperation—a model that sets new standards across borders.

Strategic partnerships, such as the one with Emirates International Hospital in Abu Dhabi, are a key element of this international focus. This close cooperation intensifies the global exchange of knowledge while establishing new, groundbreaking therapeutic approaches. Patients benefit from state-of-the-art medical standards, telemedical care, and expanded treatment options—both in Germany and in the United Arab Emirates.

In addition to patient care, specialist training also plays a crucial role. Hellersen Hospital is actively involved in the further development of international medical qualifications, thereby contributing to the sustainable strengthening of the healthcare industry. This close cooperation not only promotes medical excellence, but also deepens intercultural exchange between countries.

## From the department

Endoprothetik Hellersen



# NRW premiere: Sportklinik Hellersen is the first clinic to introduce VELYS™ robots

Leading technology and human expertise combined in the robotics center

**T**he diagnosis was clear: Bernd Jäschke needed a new knee joint. More than 15,000 knee and hip prostheses have already been implanted at the Sportklinik Hellersen. So, for the 72-year-old patient, this was a good place to turn to for help. What made him special was that he was the first patient to have his new knee joint implanted using a new robot-assisted system at the Sportklinik Hellersen.

**“Here, we combine state-of-the-art technology with our outstanding medical expertise. This is a significant step forward in knee replacement surgery.”**

**Dirk Burghaus**

Chairman of the Board of Sportklinik Hellersen.

The endoprosthesis specialist continues to have complete control over this highly complex procedure. However, they now have a state-of-the-art robot at their disposal, enabling them to work even more precisely and with even less damage to tissue. “Here, we are combining cutting-edge technology with our outstanding medical expertise. This is a significant step forward in knee endoprosthesis. For our patients, this also means an even faster recovery and a better quality of life. The robotics center is yet another example of how important it is, especially in medicine, to seize opportunities for progress and combine them with our strengths,” explains Dirk Burghaus, CEO of Sportklinik Hellersen.

The successful operation on the first patient marked the start of operations at the newly opened Robotics Center. Here, Sportklinik Hellersen uses the innovative VELYS™ Robotic Assisted Solution from DePuy Synthes (Johnson & Johnson MedTech), the global market leader and largest orthopedic company in the world.

## 15,000th joint prosthesis implanted

In 2024, Sportklinik Hellersen set a new record: the 15,000th joint prosthesis was implanted. Since the special department for artificial joints was established in 2004, the number of procedures has grown from 500 to 850 per year. Whereas hip and knee prostheses had previously been implanted in all three existing departments of what was then the Sportklinik Hellersen, this task now fell exclusively to the department headed by Dr. Joachim Hagenah, the long-standing chief physician of Endoprothetik Hellersen. “At the time, we thought that after 20 years we would have reached 5,000 to 10,000 endoprotheses,” reports the chief physician. But developments exceeded expectations. In the early years, the focus was mainly on hip operations; now, the number of hip and knee prostheses is almost equal. In addition, the range of services was expanded to include revision surgery, which now accounts for an average of 150 to 200 operations per year.

In the future, Sportklinik Hellersen will further highlight its unique selling point in the field of endoprosthesis. The new robotics center will play a decisive role in this. “We will continue to expand our position as a pioneer in quality and technology while strengthening Lüdenschied as a medical center in the interests of all patients,” explains Dirk Burghaus. Robotics represents a significant advance, particularly in knee surgery,



The VELYS™ Robotic Assisted Solution enables particularly precise and individually tailored implantation of knee endoprostheses. It was developed specifically for orthopedic surgery and captures the patient's anatomy in real time. This enables precise positioning of the prosthesis without the need for CT or X-ray images.

## More precise, gentler on tissue, faster

“With the surgeon's experience combined with the precise application of robot-assisted technology, a further development of the well-known knee navigation system, a new level in knee endoprosthesis implantation has been reached at the Sportklinik Hellersen.

We are now able to work even more precisely than before. This allows us to adjust and position the knee replacement more accurately, taking into account the individual anatomy and ligament tension of each patient. This contributes to optimi-

## How the VELYS Robotic Assisted Solution works:

The VELYS Robotic Assisted Solution uses a variety of advanced technologies to ensure that the surgeon has the information and tools they need for precise results. This valuable insight, flexible execution, and verified performance make the surgeon's work even more precise and efficient without the need for preoperative imaging.

zed functionality—movement and knee stability,” explains Bernd Irlenbusch, Leading Senior Physician for Endoprosthetics at the Sportklinik Hellersen. The robot enables extremely precise incisions, which are checked in real time. The flexion and extension gap of the joint is also checked after each step.



With the new robotics center and the use of the VELYS™ Robotic Assisted Solution, the Sportklinik Hellersen combines leading technology with human expertise.



VELYS™ Robotic Assisted Solution von Johnson & Johnson MedTech Orthopaedics (DePuy Synthes)





**“With the surgeon's experience combined with the precise application of robot-assisted technology, a further development of the well-known knee navigation system, a new level in knee endoprosthesis implantation has been reached at the Sportklinik Hellersen.”**

#### **Bernd Irlenbusch**

**Leading Senior Physican for Endoprosthesis at the Sportklinik Hellersen**


Bernd Jäschke, the first patient to benefit from modern robot technology at the Sportklinik Hellersen, is just as satisfied with the new innovation as the surgeons at the Sportklinik Hellersen. “For me, the human being is the guiding hand behind the operation, and I continue to place myself in the hands of the surgeon.

That's important to me. If new technologies now have a positive effect on the procedure and also speed up healing, so much the better. I trust Mr. Irlenbusch as my attending physician, and if he trusts the robot, I trust the robot too,” explains Bernd Jäschke. Sibylle Sieberg, who also had a new knee joint implanted with robotic assistance on the same day, feels the same way.

“I felt very good after the operation. This is not least

due to the excellent care I received at the Sportklinik Hellersen. I would also recommend the robot-assisted procedure to anyone at any time,” says Sibylle Sieberg.

#### **Quality agreement underscores expertise**

In order to further strengthen the outstanding expertise of the Sportklinik Hellersen, AOK NordWest has concluded a groundbreaking quality agreement with the specialist clinic for the new robotics center. This contract underscores the clinic's high medical standards and promotes the targeted use of state-of-the-art, robot-assisted technologies. The quality agreement once again highlights the position of Sportklinik Hellersen as a pioneer in endoprosthesis and the high standards it sets in highly qualified patient care. 



# Well prepared for surgery

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**T**he path to inpatient surgery is often accompanied by many questions and uncertainties. Careful preparation is crucial to making your stay in the clinic as pleasant as possible and ensuring that all medical and administrative requirements are met in a timely manner. At Sportkliniek Hellersen, patients can expect a structured process that covers all essential steps.



### Registration and reception

First arrive, then register: Upon arrival, proceed to the reception desk. There, you will be asked for your last name and whether this is your first visit to Sportkliniek Hellersen. You will then be given a registration number. After that, take a seat in the waiting area until your number appears on the screens above the reception booths.

### Recording patient data in patient management

When your registration number is called, you will be taken directly to the examination room. Here, your insurance card will be scanned and you will be asked for important documents such as medical reports and referral letters. Personal data necessary for treatment will also be recorded. In addition, you will receive comprehensive information and the treatment contract and consent form for the transfer of data to your family doctor or specialist will be discussed.



With private supplementary insurance, patients can take advantage of extras such as a single room or treatment by a chief physician. In addition, the details of the patient's family doctor and referring physician are recorded. All important documents—from the treatment contract to the consent form for data transfer—are compiled in the patient file.



larly. In the anesthesia questionnaire, the member of staff works with the patient to identify any potential risks during anesthesia—an important step in ensuring safe treatment.



### In the laboratory

Once the questionnaires have been completed, the examination begins: first, the patient's temperature

### Document checklist

- **Treatment agreement** – consent to inpatient treatment
- **Discharge management** – information on after-care and rehabilitation for a smooth transition
- **Data transfer to the family doctor** – permission to forward the discharge report
- **Data transfer to health insurance companies** – consent to billing for treatment
- **External writing service** – medical reports may be prepared externally
- **General data use** – permission to use important patient data for treatment
- **Doctolib use** (optional) – surgical history viewa-



### Pre-admission

In the pre-admission area, a member of staff ensures that all important information is available. Next, the nursing questionnaire is completed, which includes relevant pre-existing conditions such as MRSA, HIV, or hepatitis, as well as any medication taken regu-



is taken, then their blood pressure is checked.

This is followed by a blood sample. Pain levels are also recorded and the patient's living situation is assessed – an important aspect for planning follow-up care. Finally, medication intake is checked again: all information is compared with the data already recorded to rule out any possible interactions and risks.





### The plaster room

Sometimes it may be necessary to visit the plaster room before the operation in order to prepare for the procedure in the best possible way. Here, the fracture is stabilized or a limb is immobilized. Bone healing is also assessed here and splints are adjusted—everything is done to ensure that the treatment proceeds under the best conditions.




### X-ray

X-rays may be necessary before the operation in order to provide the medical team with all the important information they need. They help to assess bones and joints and detect any changes at an early stage. The doctor will decide which images are required on an individual basis, depending on the specific circumstances.

### Inpatient admission

On the day of the operation, admission to the hospital begins between 6 and 7 a.m. After registering at the reception desk, the patient is accompanied to the ward and given access to Wi-Fi, a telephone, and headphones.

**Important:** The patient must arrive on an empty stomach and bring all documents from the pre-admission examination with them. 



### Checklist for inpatient admission

- Documents from the pre-admission examination
- Comfortable clothing, e.g., tracksuit with legs that can be unbuttoned
- Underwear, socks
- Nachtwäsche
- Bathrobe
- Comfortable, non-slip shoes without laces
- Slippers
- Casual clothes for the day of discharge
- Shower, soap, shampoo, deodorant
- Toothbrush, toothpaste, toothbrush cup
- Towels, washcloths
- Comb, brush, hair dryer
- Shaving supplies and accessories
- Feminine hygiene products



# A digital journey of discovery with Hellersen Insight

Our clinic magazine is now interactive!



Lively, interactive, and captivating—that's what Hellersen Insight will look like in the future. Each page will become a unique journey of discovery through the Sportklinik Hellersen, captivating readers with vivid images, videos, and interactive elements.

As you flip through the pages, the images seamlessly transition into exciting videos. Graphics provide additional information about the articles, allowing you to delve deeper into the topics. Each article becomes a new adventure waiting to be explored. The interface is as simple and intuitive as flipping through a print magazine, but with the dynamism and flexibility of the digital world. Whether on a smartphone, tablet,

or desktop, the interactive clinic magazine is always available and always up to date.

This decisive step towards a digital clinic magazine not only opens up new, creative possibilities for Sportklinik Hellersen to present content, but also makes a significant contribution to environmental protection.

Reducing paper consumption automatically lowers resource consumption. This makes the digital magazine a sustainable alternative. In addition, the data protection-friendly platform ensures that readers' privacy is protected – without cookies and without passing on data to third parties..



## guest contribution

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Kreissportbund Märkischer Kreis e.V.  
Kirsten Nölle

# Take a closer look!

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KSB becomes a member of the Quality Alliance for Protection  
against Violence in Sport



**I**t has been official since January 10, 2025: The Kreissportbund Märkischer Kreis e.V. (KSB) has been accepted into the “Quality Alliance for Protection against Sexual and Interpersonal Violence in Sport.” This milestone is both a success and a driving force: the KSB is sending a clear and unambiguous signal against all forms of violence in sport and also wants to continuously accompany and support sports clubs in the district in the accession process in order to create a safe and respectful environment for all athletes.



We have looked away for long enough. Violence is a phenomenon that affects society as a whole and does not stop at organized sports. Anyone who clings to the illusory idea of an ideal (sports) world is not listening to those affected, is closing their eyes to the dangers, and, when in doubt, is only protecting the wrong people.

There are certainly factors that “favor” violence in sports: body-centered activities, the necessity of physical contact (e.g., assistance), specific sportswear, the “changing situation,” rituals such as hugs and award ceremonies, and, last but not least, the power relationship between athletes and coaches. For this reason, a comprehensive understanding of these risks is essential in order to implement prevention structures and create opportunities for intervention. And this is exactly where the Quality Alliance comes in. It is based on ten criteria ranging from formal requirements, such as the appointment of at least one contact person within the organization, to content-related requirements (conducting a risk analysis and drawing up a protection concept) and quality assurance criteria.

With Solveig Schwiederski and Cedric Kleymann, KSB has two trained contact persons who have not only raised awareness within their own organization, but also brought the issue to the attention of sports clubs in the Märkischer Kreis district. The assistance is wide-ranging and extends from support in crisis and suspected cases, to the organization of various information and training formats, to process support on the individual path to the quality alliance. Most recently, for example, there were four themed networking evenings in Hemer, Werdohl, Iserlohn, and Lüdenscheid, where Solveig Schwiederski and Cedric Kleymann answered questions from interested sports clubs.

The more sports clubs become members, the stronger the alliance against violence in sport becomes. All people are fundamentally worthy of protection. By placing a special focus on the protection of children and young people, every club has the oppor-

If you have any questions about interpersonal violence in sports, please contact the Kreissportbund Märkischer Kreis e.V.:



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Cedric Kleymann  
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tunity to present this priority as a special quality feature of its sports programs. And with the help of appropriate public relations work, a culture of mindfulness is created.

True to the motto “the journey is the destination,” it is initially irrelevant where a sports club currently stands. The most important thing is to remove the taboo surrounding violence in sports. This includes recognizing that silence definitely protects the wrong people!

Further information is available here:

<https://www.ksb-mk.de/unser-themen/schutz-vor-gewalt-im-sport>



# The call of nature: outdoor sports

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© LSB NRW / Bowinkelmann



**L**eave everyday life behind and get in direct contact with mud or snow, wind or waves, rain or sun. All sports physicians unanimously emphasize the positive effects of “outdoor sports.” And the social aspect is now also being explored. The German Sport University Cologne has a chair for outdoor sports and the environment. Here are a few examples of outdoor sports:

If you want to understand outdoor sports, you should head to Markstraße in Winterberg. Peter Kramer welcomes you in an orange “Great Outdoors” sweatshirt embroidered with an emblem of Mont Blanc. In the background are snow-covered mountains, and in the foreground, wild animals on a green meadow.

In the stairwell, visitors are greeted by a photo of Peter on Mount Kilimanjaro. The cold, the thin air, the light in the high mountains... everything is physically palpable when you look at it. As are the limits of human physical and mental capabilities. This contrast: nature in all its majesty and power on the one hand. And humans on the other, at altitudes that

are death zones. “I had to turn back at 8,450 meters during the ascent, 398 meters short of the summit. But the summit is not the goal, it's getting back down safely,” says the 60-year-old.

As contradictory as it may sound, philosophically speaking, humans and nature cannot be separated, according to one of the most important thinkers of our time: “The idea that we can go into nature, or stand outside it, as if we were not part of it, comes from modern science and its desire to control nature,” says American author Siri Huvstedt. “Natural disasters and new threats to the planet were the result.”



**Mountaineer Peter Kramer (left) from Winterberg and author Theo Düttmann**

### Staying at home is not a solution either.

Peter Kramer underscores these statements. He observes it right outside his front door. Despite all his travels to faraway places, he has remained loyal to his winter mountain, which rises 800 meters above sea level, and to his club, the Winterberg Ski Club. He is well aware of the contradictions of winter sports. On the one hand, in times of climate crisis, the slopes are made ready for use with artificial snow produced from renewable energies. On the other hand, the athletes generate so much CO<sub>2</sub> when they travel to the resort that any conservationist would think: The many tourists from Holland should stay at home and go cross-country skiing on rollers in the dunes. "But the absence of visitors would have devastating consequences for our economy," he realizes.

Peter finds what reconciles him just a short walk away from the hustle and bustle of the arena, in a valley. Pure nature. No sounds except birds chirping, trees swaying in the wind, pattering rain, fragrant spruce trees, and the murmur of a stream. Occasionally a jogger comes by, but otherwise there is no one else around. He mentions that he is noticing fewer and fewer insects on his walks, that the salamanders have disappeared due to a plague, and that the bark beetles have done a thorough job. But his valley remains his valley – even if it is changing. "And I won't tell you its name, otherwise we'll soon have Instagrammers here looking for the best photo..."

### „Knödel“ has the found peace

Change of scene. Eifel National Park: The hooves of the Icelandic gelding, whose real name is Randver vom Resterberg, plow through the leaves in a steady rhythm. He jumps around, surrounded by Polly the dog, who is begging his rider for a treat. "I grew up with animals," laughs Irene Hansen-Schmitz, "with goats, rabbits, and donkeys." She regularly roams the surrounding forests of her home village of Nettersheim-Engelau in the Eifel region with her horse Knödel. "I have a close connection with animals. I can leave everything behind me and don't need a vacation," she says. Nothing escapes her watchful eyes, be it a beetle on the path or a deer at the edge of the forest.



She takes everything in. As a biological-technical assistant and daughter of an organic farmer, she is all too aware of the impact humans have on the environment: "When I see a field being overfertilized with manure, it hurts." Nature conservation is close to her heart. "As chairwoman of the Nordeifel Icelandic Horse Riding Club, I really appreciate that our riders learn rules for how to behave in nature. I don't ride across forests and meadows either."

Further information on the topic of sport, the environment, and nature can be found at: [www.lsb.nrw/unsere-themen/sportraeume-umwelt/sport-umwelt-und-natur](http://www.lsb.nrw/unsere-themen/sportraeume-umwelt/sport-umwelt-und-natur)





From the department  
sports medicine

# Get ready for the P-Weg with Sportmedizin Hellersen

**J**ust a few months ago, I could hardly have imagined ever running a half marathon. Regular running training was a foreign concept to me, and when I laced up my worn-out running shoes for the first time three months ago, I couldn't manage a single kilometer. But sometimes all it takes is a crazy idea to completely turn your everyday life upside down.

In search of a new challenge, I came across the P-Weg Marathon in Plettenberg, which celebrated its 20th anniversary last year. What I didn't realize at the time was that the half marathon through the four valleys is really tough: 21.1 kilometers through picturesque low mountain ranges, 540 meters of elevation gain, and terrain consisting mainly of forest and gravel paths. What initially sounded like a sporting experiment soon turned into a serious mission. To prepare myself as well as possible for the running event, I sought expert support at Sportmedizin Hellersen.

The anamnesis interview – the most important part of the sports medicine examination

As part of the sports medicine examination, Dr. Ulrich Schneider, Chief of Sportmedizin Hellersen, first conducts a detailed anamnesis interview with me – the most important part of the examination.

He asks precise questions about my training habits, my previous running performance, and any health restrictions. He is particularly interested in how I am preparing for the challenging elevation gain of the P-Weg Half Marathon—an aspect I had previously underestimated. I admit that I don't have any exact data and that I mainly train on slightly hilly terrain, such as dams or in the forest.

So far, I have only tackled steep climbs by walking quickly. I have already managed twelve kilometers several times during training, but without any significant elevation gain.

"That's perfectly fine," the sports physician encourages me. "Managing twelve kilometers after three months is already a huge achievement."



## Explanation of the training areas

### compensation range (KB)

- Goal: Recovery after intense workouts
- Metabolism: Fat burning
- Type of training: Continuous method
- Duration: 30 to 45 minutes
- Terrain: Flat

### Basic endurance 1 (GA1)

- Goal: Improvement of endurance and cardiovascular performance
- Metabolism: Fat burning
- Training method: Continuous method
- Terrain: Flat to slightly hilly.
- Use: All year round, especially in the preparation phase

### Basic endurance 2 (GA2)

- Goal: Improve endurance and capillary formation
- Metabolism: Burn fat with more carbohydrates
- Training method: Continuous training and extensive interval training
- Terrain: Flat or hilly
- Use: Preparation and competition phase

### Development area (EB)

- Goal: Improving endurance for competitions
- Metabolism: Carbohydrates, lactate elimination
- Training method: Intensive interval method and competition simulation
- Terrain: Flat or hilly.
- Use: End of preparation period and competition preparation

### Top range (SB)

- Goal: To improve speed and anaerobic performance
- Metabolism: Carbohydrates and phosphate
- Training method: Intensive interval method
- Terrain: Flat or hilly
- Use: Competition preparation

He asks me specific questions to assess my physical condition and health. Susceptibility to infections, allergies, previous illnesses, family illnesses, sleeping habits, medication—nothing seems to stand in the way of my goal. Only my initial naivety and starting out with worn-out running shoes came back to haunt me: painful ankle inflammation forced me to take a break. I solved the problem by buying the right running shoes.



“These are classic beginner's problems,” explains Dr. Schneider, emphasizing how important it is to increase the load gradually to avoid overexertion. He praises my progress so far and is optimistic that I can master the challenge of the P-Weg if I continue to train consistently.

The sports medicine examination is not only used to assess performance, but also for prevention: “We want to ensure that there are no health risks and that your musculoskeletal system can cope with the increased strain,” emphasizes the sports physician. He is particularly pleased that I am less prone to illness thanks to the training—an effect that has already been proven by sports medicine studies.

## From orthopedic analysis to stress testing

After the medical history interview, the internal medicine and orthopedic examination continues: Dr. Ulrich Schneider measures my blood pressure, listens to my heart, and carefully checks my joints and muscles. Sports scientist Andreas Kramer then uses a body fat scale to determine my weight, body mass index (BMI), and body fat percentage. At 56.9 kilograms, 162.5 centimeters tall, with a BMI of 21.5 and a body fat percentage of 22.3%, I am in the optimal normal range for adults.



The tests are followed by a resting ECG, which measures my heart activity while I am relaxed. Electrodes record the electrical impulses of the heart to check whether it is beating regularly. This allows any abnormalities, such as cardiac arrhythmia or signs of strain, to be detected at an early stage.



For the stress ECG, I then get on the treadmill. A breathing mask measures my oxygen consumption and carbon dioxide output, while an ECG device monitors my heart rate and rhythm. Additional sensors record my pulse and blood pressure as the intensity of the workout is gradually increased.



A key component of the stress ECG is lactate measurement. While I run, a drop of blood is taken from my earlobe at regular intervals to determine the lactate level. This value shows how my body builds up lactic acid (lactate) during exercise and helps to determine my anaerobic threshold—the point at which lactate build-up and breakdown are just balanced. Rising lactate levels indicate that the exercise is becoming more intense and fatigue is setting in.



## Clear training recommendations for competitive success

“The lactate values show us how strenuous the training is for your body,” explains Andreas Kramer in the follow-up discussion. “The results from the test clearly show that you still have a very low lactate value at low intensity, for example at a speed of 7.6 km/h. This means that you are in a moderate training zone where your body tends to burn fat.”



In the middle range, at slightly higher speeds, the body will rely more on carbohydrates, which is a crucial basis for more intensive interval training. “For the P-path, it is important that you stay in the so-called development zone during individual training sessions, as this is where you can build up your competition-specific endurance and develop the strength you need for climbs and altitude,” explains the sports scientist. It is crucial that the training is not too intense, but rather remains in the moderate range in order to promote fat metabolism and cover long distances efficiently.

Your heart rate plays an important role here. “Your goal should be to stay below a heart rate of 160 to optimize your fat metabolism. If you're below 160, you can run longer and thus train the necessary endurance,” he explains. Special attention should be paid to combining interval training with longer, less intense training sessions. “You should incorporate interval training once a week to increase the intensity and improve your performance on steep climbs,”

advises Andreas Kramer, adding: “Interval training should be designed so that you challenge yourself intensively but don't overexert yourself. For the P-trail, it's important to also train specifically for the uphill and downhill sections.”

In addition, I should not experiment with my diet during training, but rather provide my body with the nutrients it needs. Especially during intense work-



outs, the focus should be on carbohydrates to provide the necessary energy. Immediately after training, it is crucial to consume carbohydrates and fluids quickly to promote recovery and get the body ready for the next workout. Your diet should be balanced and healthy, but shortly after training, it is important to replenish your carbohydrate stores quickly. Before intensive training sessions, it is advisable to add carbohydrates – and if necessary, also during the session, for example in the form of bars or gels. Especially during interval training, your legs can react with fatigue, and additional energy can then be very helpful. For longer, more relaxed sessions, I should also eat enough in the days before so that I can easily manage the 90 minutes without additional food.

## Ready for the P-Weg – no pain, no gain

I leave the sports medicine clinic feeling optimistic and start the real work: implementing the training recommendations. I notice my difficulties particularly during interval training, whereas long-distance runs are easy for me and fun. Nevertheless, I torture myself once a week by running up the Herscheid mountains to prepare myself optimally for the





challenges of the P-Weg. After three weeks, I notice that the climb is getting easier and easier and I can run up the hill for 10 minutes without stopping. The training is getting better and better each time and I feel ready for the challenge.

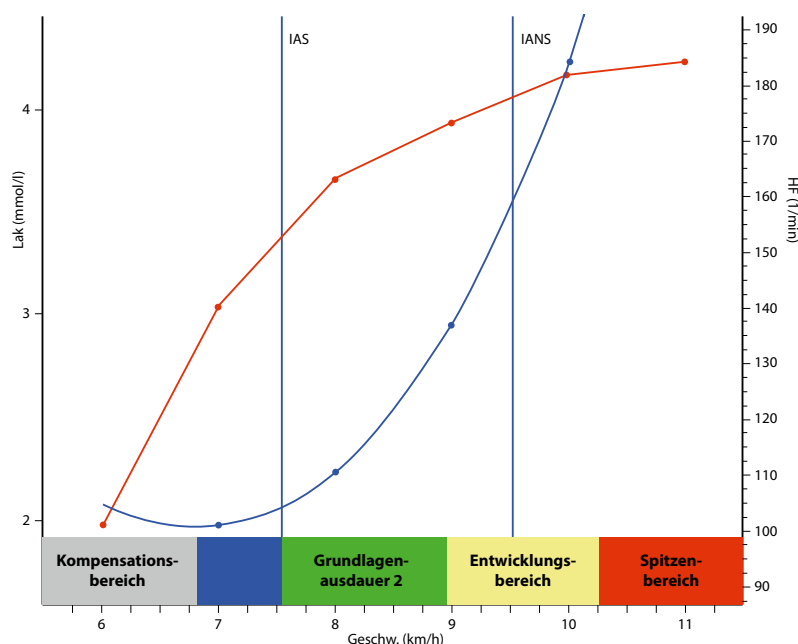
Then, four weeks before the big running event, it happens: I come down with a bad case of the flu. Running training is out of the question. Even after I recover from the infection, I notice how difficult the training still is. About a week before the P-Weg, however, I want to find out once and for all – can

**„For the P-Weg, it is important to also train specifically for the uphill and downhill sections.“**

**Andreas Kramer**  
Sportwissenschaftler in der Sportmedizin Hellersen

I do it or can't I? Together with a friend who has already run the P-Weg once, I run the route. The result: it was totally exhausting, and I had doubts as to whether I could really do it. But in the end, I was incredibly happy to have mastered the route. It felt like a huge success, even though I knew that the actual competition was still ahead of me.

A few days before the running event, I received some more good news: a friend who had already been supporting me intensively during training had recovered from his knee injury and was able to register for the P-Weg at short notice. Since it's easier to run with a partner, I was incredibly grateful for this support. To be as well rested as possible, I went to bed early the night before and, despite my nervousness, slept surprisingly well. I also followed the sports scientist's recommendation to start both training and the competition with full carbohydrate reserves and ate a high-calorie breakfast.



## The highs and lows of the running event

With my running shoes tightly laced and plenty of glucose and gel in my bag, I head to the starting point in Plettenberg town center. After the starting signal, we run through the town center, past the cheering crowds, until we reach the first hill. I walk up this hill at a fast pace, as I know from my previous trial run that I won't be able to run up it. I need the energy I've saved to complete the entire 21.1 kilometers.



The first 4.5 kilometers to the first aid station are relatively easy for me – nevertheless, I take Andreas Kramer's advice and drink a Coke to help me get through the next few kilometers. We continue towards the district of Landemert until we dive back into the forest, where the next challenge awaits me after a few kilometers: the Bärenberg.

At a height of 498 meters, it is considered a real test for all P-Weg runners. After I have managed the climb, the route goes steeply downhill. The trail continues through the picturesque landscape to the last refreshment station at Tanneneck. Here I notice how my strength is slowly fading. The last 5.2 kilometers are still ahead of me. Back in the forest, my reserves are almost exhausted. I notice this especially when the trail descends – a real test of endurance for my tired legs. However, the last few meters to the finish line are without any major difficulties. Exhausted but happy, I reach the event stage, where a medal and refreshments await me. Originally, my only goal was to complete the half marathon, but I was still aiming for a time of 2:30 hours. With a time of 2:36 hours for the challenging, mountainous course, I am very satisfied and proud of my performance – especially for my first half marathon. ▀



**Dr. Ulrich Schneider**  
Chief of Sports Medicine /  
Internal Medicine



Whether performance and check-up examinations or squad testing for sports teams – competitive and elite athletes are regular visitors to Sportmedizin Hellersen. Amateur and recreational athletes as well as those new to sport also benefit from this expertise. Sports scientists and doctors examine endurance levels, check posture, and measure strength to identify any deficits and, if necessary, work together to develop a training plan tailored to each individual's personal goals and abilities. Sports medicine is the point of contact for athletes who want to optimize their performance, as well as for beginners or those returning to sport, for example to rule out risk factors for the cardiovascular system. Patients with conditions that primarily require a medical examination under stress are also in the right place at Sports Medicine.

## Treatment focus

### Internal medicine and orthopedic sports medicine

- Sports Medicine / internal medicine
- Sports medical examination
- Performance diagnostics
- Bioimpedance analysis
- Sports science consulting and training planning



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## From the department

Plastic, reconstructive, and aesthetic surgery



# From explantation to breast reconstruction

How aesthetic surgery changes not only changes the body,  
but also life

**I**n an interview with Hellersen Insight, Dr. Petra Scheffer, Chief of Ästhetik Hellersen, tells the impressive story of a patient who found her way to Sportklinik Hellersen after the implant manufacturer issued a recall and her breast implants were subsequently removed. After the implants were removed, the patient suffered from severely deformed and asymmetrical breasts that were marked by deep scarring.

**Can you explain what type of breast implants were originally used in the patient and why they were recalled?**

Dr. Petra Scheffer: The patient received textured implants in 2013. At that time, the choice was main-

ly between smooth and textured variants. Smooth implants were less commonly used in Europe and the US because they were more likely to cause capsular contracture and could slip more easily. Textured implants were considered a better choice



Findings after 2x external surgeries



6 weeks after 3rd surgery



6 months after 4th surgery

**„We take such complaints very seriously and investigate them thoroughly.“**

**Dr. Petra Scheffer,**  
Chief of Plastic, Reconstructive and Aesthetic Surgery

because their rough surface promoted stability in the tissue.

Over time, it became apparent that certain heavily textured implants were associated with late complications. Fluid formed around the implants and, in rare cases, cancer cells were found in it. As of 2018, there were 516 documented cases worldwide of BIA-ALCL, or breast implant-associated anaplastic large cell lymphoma. At that time, there were about seven cases in Germany. This cancer affects lymphocytes, a type of white blood cell, and can occur not only in the fluid around the implants, but also in lymph nodes, bones, lungs, or the liver.

The recall related to highly textured implants, particularly those from one manufacturer, whose stock was withdrawn in Europe at the end of 2018 and worldwide in 2019. The recall only affected the texture of the implant surface and had no impact on implants that had already been used or their contents. Since then, the industry has switched to microtextured surfaces to meet the highest standards.

### How can such complications be recognized and how are affected patients treated?

Dr. Petra Scheffer: Typical symptoms of a possible complication after implantation include breast swelling, redness, or a feeling of pressure. It is important to rule out infections first, as these occur much more frequently. However, degeneration, i.e., uncontrolled cell change in which cells lose their normal structure and function and become malignant tumors, is extremely rare—the probability is about 1 in 1 million. If there is still suspicion, a standardized procedure is followed: First, an ultrasound or MRI examination is performed. If fluid is present, it is punctured using ultrasound and analyzed comprehensively – around 100 ml of fluid is removed to obtain sufficient material for laboratory analysis. The fluid is examined for cancer markers using immunohistochemistry and for possible bacterial infections.

### What is BIA-ALCL?

- BIA-ALCL: Breast implant-associated anaplastic large cell lymphoma
- Rare type of cancer associated with breast implants
- Typically occurs 8–10 years after implantation
- Main symptom: fluid accumulation around the implant
- Higher risk with heavily textured implants

„During follow-up checks, the patient described how happy she now is in retrospect.“

**Dr. Petra Scheffer,**  
Chief of Plastic, Reconstructive and Aesthetic Surgery

In the present case, the patient complained of pain in her left breast in 2021. After thorough diagnostics, another hospital decided to remove the implants. Such decisions are made on an individual basis and based on the respective findings. Fortunately, the examinations confirmed that the patient did not have malignant tumor disease.

**How did you assess the patient's severely scarred and asymmetrical breasts after the implant removal? What options did you suggest to her?**

Dr. Petra Scheffer: First, I examined the patient, felt the scars, and assessed the movement of the breast, for example when she raised her arms. I noticed that the breast was very deformed and asymmetrical. There was almost no volume left, especially in the lower part of the right breast. The breast had completely lost its round shape due to the pronounced scars.

I then explained to the patient step by step how I would proceed, and we discussed it together in front of a mirror so that she could understand it better. My suggestion was to first remove the scars and restore the breast to a round shape. Although it would be possible to insert an implant immediately, this carries a high risk of complications.

Removing scars creates larger wound areas that can bleed more heavily. There is also a risk that a heavily scarred and hardened capsule will form around the implant shell. I therefore recommended that she wait at least six months after scar removal and shape correction before considering implants.



### Implant Registry Germany (IRD)

- Mandatory introduction since July 2024
- Documentation of all implants used
- Improved traceability and patient care
- Reporting obligation for healthcare facilities
- Goal: Quality assurance and long-term monitoring of implants
- Legal basis: Implant Register Act
- Further information:
  - BfArM (Federal Institute for Drugs and Medical Devices)
  - DGPRÄC (German Society for Plastic, Reconstructive, and Aesthetic Surgery)



**“This approach gave the patient the opportunity to decide calmly what was best for her in the long term.”**

Dr. Petra Scheffer,  
Chief Physician for Plastic, Reconstructive,  
and Aesthetic Surgery

During this time, the breast will settle into its natural teardrop shape as the swelling subsides.

I also offered her the option of foregoing implants altogether if she was satisfied with the natural shape of her breasts after healing. The symmetry could be adjusted, for example, with autologous fat on the right side without further surgery on the left. However, implants can achieve a larger overall volume. This approach gives the patient the opportunity to decide at her leisure what is best for her in the long term.

#### **Why were different implant sizes used during the last operation?**

Dr. Petra Scheffer: The lower right breast pole was significantly smaller than the left, which is why I chose a larger implant of 425 ml on the right side to balance the shape and volume. On the left side, I used 350 ml to achieve a symmetrical and aesthetically pleasing breast shape. We opted for anatomical teardrop-shaped implants, as these are particularly well suited to compensating for defects in the lower breast area, whereas round implants would tend to emphasize the upper area. Anatomical implants offer a natural breast shape and, when placed correctly, can produce excellent results.

#### **What is the aftercare for the patient and how do you ensure that no further complications arise?**

Dr. Petra Scheffer: After discharge, I usually see all patients, regardless of whether they were treated on an outpatient or inpatient basis, after two days and then again after two weeks.



We use absorbable material in the crease under the breast; only the knots at the ends are removed after two to three weeks. This is followed by check-ups after six weeks and six months.

I always advise my patients to inform their gynecologist that they have implants and to provide them with the implant card and a surgical report. As part of routine examinations, an ultrasound of the breast should be performed annually.

In addition, it is important that patients regularly examine their breasts themselves, as in breast cancer screening. If unusual symptoms such as pressure, swelling, redness, or pain occur, patients should contact us immediately. We take such complaints very seriously and investigate them thoroughly.

#### **What are your long-term expectations regarding the durability and safety of the new implants?**

Dr. Petra Scheffer: In general, breast implants are not designed to last a lifetime, as there is always a certain amount of material fatigue. However, we now use modern implants that have a multi-layered shell and contain cohesive gel instead of liquid silicone—similar to “jelly.” This means that the gel

cannot leak out if the implant ruptures. While it used to be recommended that implants be replaced after about 10 years, there are no longer any firm recommendations.

The main problem is not the material of the implant, but the body itself. The body always forms a thin shell around the foreign body, known as a capsule. However, if this capsule hardens or scars, it can contract so much that it causes pain and changes the shape of the implant. In such cases, the implant must be removed and possibly replaced.

To minimize the risk of capsule hardening, we place the implant under the muscle and choose a fine texture for the implant surface. Studies show that the incidence of capsule formation ranges between 0.6 and 17 percent. In this patient, the risk is slightly higher due to multiple surgeries and existing scars. We therefore proceeded with particular caution. We first reconstructed the breast and allowed it to heal for about nine months before inserting implants. This sequential approach helps to significantly reduce the risk of capsule formation.

### How did you support the patient emotionally after the numerous procedures and the associated challenges?

Dr. Petra Scheffer: When I first met her, the patient was rather reserved and often turned to her husband, who accompanied her. It is understandable that she was very unsettled by her previous experience and therefore wanted to seek a second opinion. My detailed explanations of the advantages and disadvantages of the various surgical options and the resulting understanding of the patient and her partner of how the complex healing system works gave her security and confidence. She had enough time to decide whether she really wanted to have implants again. The patient also received valuable support from her husband, who accompanied her to all important appointments and procedures. Later, it was clear that she was able to attend the follow-up appointments independently and with a positive attitude.

Her relief at not having a malignant disease was palpable, and the open communication helped her to make an informed decision, including the option of not having implants. Overall, I consider her to be a stable person who maintained a positive attitude despite the challenges. During the last follow-up appointments, the patient described how happy she was each time. jetzt sei.



## Surgeries performed

### First breast surgery:

- **2013:** External breast augmentation
- Implants: 360 ml per side
- Recall of macrot textured implant stocks due to occurrence of BIA-ALCL

### Removal of implants:

- **March 2022:** Breast implants were removed
- Examination revealed no malignant tumor disease

### First corrective surgery:

- **June 23, 2023:** Surgery performed by Dr. Petra Scheffer
- Scars were removed and the breast was lifted to restore its shape

### Second corrective surgery:

- **March 25, 2024:** Breast augmentation performed by Dr. Petra Scheffer
- New implants: Anatomical, teardrop-shaped implants inserted under the muscle
- Sizes: 350 ml left side, 425 ml right side to correct asymmetry

## What I like is beautiful!

### **Aesthetic surgery from person to person**

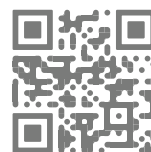
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## From the department

Center for Specialized Pain Medicine



# The fight against migraine

Symptoms, treatment, causes – pain specialist explains

**A**ccording to the German Medical Journal, migraine is the most common neurological disorder. Six to eight percent of all men and even more women—12 to 17 percent—suffer from migraine. There is no special migraine diet. However, there are some triggers that can promote this type of headache. Dr. Wolfgang Welke, chief of Special Pain Medicine at the Sportklinik Hellersen, explains the most important facts about migraine in an interview.

### What is migraine, in fact?

*Dr. Wolfgang Welke:* Migraine is a very debilitating type of headache that affects many people and significantly reduces their quality of life. There are different types of migraine. These vary, for example, in the frequency of attacks—some patients experience migraine attacks only twice a year, while others have them daily or several times in a row. The latter usually require long-term preventive medication. There are migraines with neurological deficits, such as paralysis, numbness,

or visual disturbances. Another form is perimenstrual migraine, which is associated with hormonal changes during a woman's menstrual cycle. These are often patients who are bedridden for several days and suffer greatly from the symptoms.

The major risk associated with migraines is that patients take non-steroidal painkillers such as ibuprofen, naproxen, or diclofenac relatively freely to relieve the pain. However, this uncontrolled use can damage organs and even lead to drug dependence. There is a type of medication-induced headache



in which frequent use of painkillers itself leads to headaches.

**„We give patients a headache diary. In it, they note exactly when the headache occurs, how long it lasts, and how often it occurs per week and month.“**

**Dr. Wolfgang Welke**  
Chief of Special Pain Medicine

#### **What are the typical signs of a migraine?**

Dr. Wolfgang Welke: The pain is described as moderate to very severe, usually requiring acute medication. Attacks of throbbing headaches, often on one side of the head, irregular, sometimes daily, accompanied by nausea and vomiting as well as sensitivity to light. Often, one side of the forehead, temples, or eye area is affected. Changes in the sense of smell and taste or other neurological deficits may occur.

Patients may say beforehand: “Here it comes!” They have preliminary symptoms such as visual field defects, flickering eyes, or nausea. This is why we refer to migraine with aura (with preliminary symptoms) or without aura. We ask about all of this in order to obtain a reasonable headache history from the patient, as there are over 100 different types of headaches. And migraine is just one of them. For successful treatment, the type of headache must be correctly diagnosed.

#### **When should a migraine be treated by a doctor?**

Dr. Wolfgang Welke: It is always important to get to the root cause. Comorbidities, i.e., additional health problems that can occur alongside the primary condition, should be taken into account. One example of this is problems with the cervical

spine, such as herniated discs, disc protrusions, or narrowing of the spinal nerves, which can lead to cervicogenic headaches. Cervicogenic headaches arise from problems in the cervical spine or neck area, can extend to the head, and can therefore also be associated with migraine.

In such cases, it may be necessary to provide orthopedic pain therapy as part of the treatment or as a preventive measure. This may reduce the frequency of attacks, both in terms of number and intensity.

#### **So it's not just the symptoms that are treated?**

Dr. Wolfgang Welke: The first step in treating a migraine patient is to identify the symptoms in order to classify the migraine. Is it really a headache on one side of the head? In one-fifth of cases, however, both sides are affected. And in 80 percent of cases, migraine headaches are also associated with tension headaches, contrary to what is typically described in textbooks. This means that it is often a mixed form of headache.





We give patients a headache diary. In it, they note exactly when the headache occurs, how long it lasts, and how often it occurs per week and per month. Based on this information, it is possible to say quite clearly what type of headache the patient is suffering from.

**„We are clearly trying to get to the bottom of the cause.“**

**Dr. Wolfgang Welke**  
Chief of Special Pain Medicine

#### **What are the possible causes of migraine?**

Dr. Wolfgang Welke: The cause of migraine is controversial. It is assumed that it is related to a circulatory disorder, specifically a dilation of the meningeal vessels, i.e., the vessels of the meninges. This, in turn, is most likely related to a specific neurotransmitter, namely serotonin, whose precursor is the amino acid tryptophan. Various deficiencies can lead to serotonin deficiency syndrome and vascular dysregulation. Migraine patients often describe a pulsating headache that is synchronized with their pulse—another small indication that the blood vessels are involved somewhere.

#### **What might treatment look like once the symptoms have been identified?**

Dr. Wolfgang Welke: First, a distinction is made between acute and chronic migraine. Chronic migraine—defined as more than three attacks per week lasting more than three or four days—may be an indication for migraine prophylaxis.

Many patients take nonsteroidal medications for acute migraine attacks. Naproxen, on the other hand, is very often helpful for menstrual migraine.

As I said, duration and frequency are important, and it may well be that with sensible prophylaxis, for example with a beta blocker, the frequency of attacks can be drastically reduced, making the whole thing bearable.

#### **What about other cases?**

Dr. Wolfgang Welke: In a migraine emergency, the patient cannot get out of the attack, has extreme headaches, and is admitted to the hospital for acute treatment.

Here, Aspisol—an aspirin infusion, a Novalgin infusion, a paracetamol infusion, or intravenous cortisone—can be administered to get this severe condition under control as quickly as possible. A subcutaneous injection or nasal spray of a triptan can also help very quickly. These are a class of drugs that have been specifically developed for the treatment of migraine attacks and have revolutionized migraine therapy. They are well tolerated and highly effective in migraine attacks.

**“That's always the goal:  
as few migraine attacks  
as possible.”**

**Dr. Wolfgang Welke**  
Chief of Special Pain Medicine

**In most cases, patients do not come to the pain clinic first. What is the typical journey for a migraine patient?**

Dr. Wolfgang Welke: That's right, patients often come to us pain specialists at the end of the chain. The normal route is usually for the patient to see their family doctor first. They should also definitely see a neurologist, as headaches can have other causes, including meningitis or a brain tumor. An EEG and a cranial MRI are therefore usually necessary. An MRI of the cervical spine is also necessary to clarify the orthopedic history. If the symptoms and the evaluated pain questionnaire confirm that it is migraine, it can be treated with medication and behavioral therapy. Diet also plays a major role, as do the patient's behavior and occupation or posture at work. Stress and psychological strain are common triggers for migraine attacks. If a few factors are changed, the number of attacks will already decrease. And that is always the goal: as few migraine attacks as possible.

**Can migraine be completely cured?**

Dr. Wolfgang Welke: There are cases where migraine disappears – in women, this usually happens during menopause. There are patients who only develop migraines after menopause. This is difficult to predict. What is definitely possible is to pay attention to the triggers. These include, for example, magnesium deficiency, dehydration (you should drink at least two liters a day), lack of sleep, electrolyte imbalance, and a deficiency in vitamin D or B6 vitamins.

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**Dr. med. Wolfgang Welke**  
Chief Physician  
Center for Special Pain Medicine

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From the department

Specialized spinal surgery

## Bye wheelchair!

How a patient got back on his feet after pain, despair, and hope



**F**rom active martial artist to patient with severe chronic pain and serious back problems – Jan Plomann has had to cope with profound changes in his life in recent years. What began with a slight pulling sensation in his back and occasional discomfort developed into severe pain and a life in a wheelchair.

The cause of his complaints: congenital spondylolisthesis, also known as vertebral slippage. After several operations in other hospitals, it was only at the German Spine and Scoliosis Center at the Sportklinik Hellersen that he found the medical care he had been looking for in Liang Zhou, Senior Physician in Special Spinal Surgery.



In 2019, Jan Plomann, a 28-year-old man, began a painful and difficult period full of unexpected challenges. As a fit and active person, he spent his free time training extensively in martial arts. However, the first symptoms appeared after he suffered an umbilical hernia during a training match. He had already noticed occasional pain and a pulling sensation in his back. It also turned out that a mesh implanted after a previous hernia had torn and was pinching a nerve and the spermatic cord.

The combination of these injuries led to significant restrictions in movement – a condition that made it impossible for him to continue playing sports or performing the stretching exercises that were so important to him. This contributed to a steady deterioration in his physical condition. Only after thorough examinations was he finally diagnosed with congenital vertebral slippage – a rare malformation that caused severe symptoms in his case.

“Vertebral slippage is a malformation in which the structure of the vertebral body is separated. Under stress, such as from sports or long-term strain, the affected vertebral body slips forward. This causes the nerve roots to move along with it, while the intervertebral disc is pushed backward. This dis-

### What is spondylolisthesis?

Spondylolisthesis, also known as vertebral slippage, is a condition of the spine in which one vertebra slips forward over the vertebra below it. This malformation or instability can be congenital, develop due to degenerative changes with age, or be caused by excessive strain, injury, or accidents.

Typical symptoms include back pain, which often radiates into the legs, restricted movement, muscle tension, and weakness in the legs. In severe cases, nerve damage or even paraplegia may occur.



placement can irritate or pinch the nerves, resulting in severe pain and restricted movement,” explains Liang Zhou, Leading Senior Physician in Specialized Spinal Surgery.

However, the first operation, performed at a hospital in Switzerland, did not provide complete relief: the torn mesh in his groin, a splinter in his knee, and the lack of physical therapy prevented him from doing the necessary exercises for his back. “I later learned that apparently not enough space had been left for the spinal canal during the operation. This complication led to the development of spinal stenosis, which ultimately required a second back operation,” reports Jan Plomann.

In December 2021, he underwent a second back operation at another hospital, during which a fixation was performed. Although he felt relief from the chronic nerve pain after the procedure, especially in his left leg, the numerous operations—four in total within a year—took a heavy toll on his body. In addition to the two back surgeries, he also required procedures on his groin and navel, which further limited his mobility.

After the operation, the young man was still confined to a wheelchair and suffered from severe pain that made any movement almost impossible. Several falls and open wounds documented his desperate attempt to lead a normal life. It was only when he arrived at the Sportklinik Hellersen that he felt taken seriously for the first time. “The doctors took the time to see me as a person and to take a close look. I am eternally grateful to them for that,” he emphasizes.

## What is spinal stenosis?

Spinal stenosis is a narrowing of the spinal canal, which contains the spinal cord and nerves. This narrowing puts pressure on the nerves, which can cause various symptoms. The most common causes are degenerative changes such as osteoarthritis or disc degeneration, bone spurs, thickened ligaments, injuries, or congenital malformations.

Typical symptoms include back pain that often radiates into the legs, tingling, numbness, or weakness in the extremities. Many sufferers report pain that increases when walking or standing, while the symptoms can often be relieved by bending forward or sitting down.

**“The doctors took the time to get to know me as a person and to take a close look at my condition.**

**I am eternally grateful to them for that.”**

**Patient Jan Plomann**

The patient was first examined in detail in the Special Spinal Surgery Department of the German Spine and Scoliosis Center at the Sportklinik Hellersen.

“The patient's condition was extremely critical. The muscles in both legs had completely atrophied and he had no strength whatsoever. From a clinical point of view, he was paraplegic,” reports the senior physician. To determine the cause of the paraplegia, Jan Plomann was first referred to a neurologist to rule out neurological disorders. However, all the tests carried out, including magnetic resonance imaging and electronic diagnostics, did not reveal any significant findings that could explain the paraplegia. “After



**During the procedure, the implants and the disc replacement were successfully replaced.**

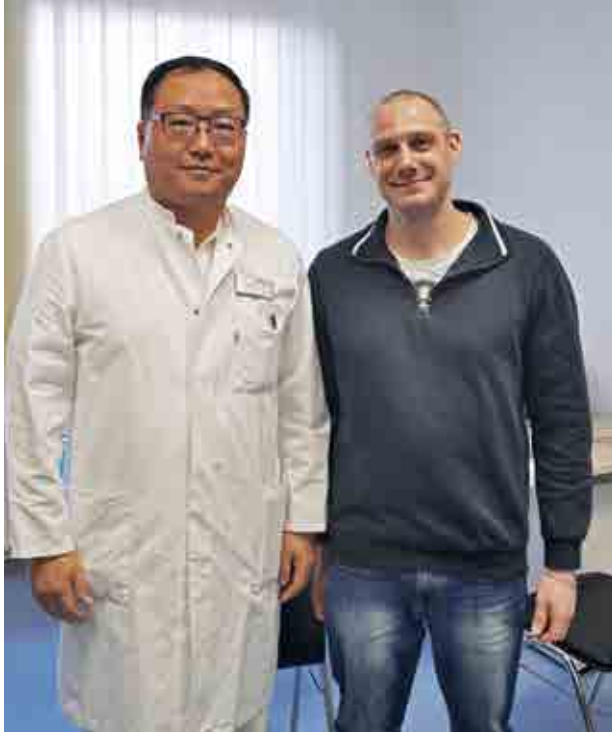
the second operation, the disc replacement and the upper and rear screws were loose. The rear structure of the vertebral body had been removed, leading to complete instability of the anterior segments. The implants failed after the second operation, which we identified as the main cause of the symptoms and which necessitated further surgery,” explains Liang Zhou. During the procedure, the implants and the disc replacement were replaced.

After the operation, the patient felt the first signs of improvement. In particular, the persistent nerve pain that had previously affected his left leg subsided. But the road to recovery was rocky. A subsequent

**“The patient's condition was extremely critical. The muscles in both legs were completely atrophied and he had no strength whatsoever. From a clinical point of view, he was paraplegic.”**

**Liang Zhou**

**Leading Senior Physician Special Spine Surgery**



infection led to further hospital stays, antibiotic treatments, and renewed surgery. Shortly thereafter, he suffered an intestinal obstruction, which set him back again. "I just didn't want to go on anymore. My body was at the end of its rope, inflamed, exhausted. If someone had told me that I could break down like that, I wouldn't have believed them," he reflects.

Despite this difficult time, he fought his way back to life. Jan Plomann was already able to walk with the aid of crutches when he attended his first follow-up appointment. The back pain had subsided significantly and the muscles in his legs were beginning to rebuild. "Of course, there are still limitations—I'll probably never fight again. But I'm grateful that I can stand and walk." Lifting weights remains particularly problematic; even a few kilograms can cause severe pain. But through patience, acceptance, meditation, and the support of his family and friends, he has learned to live with the limitations. ▀

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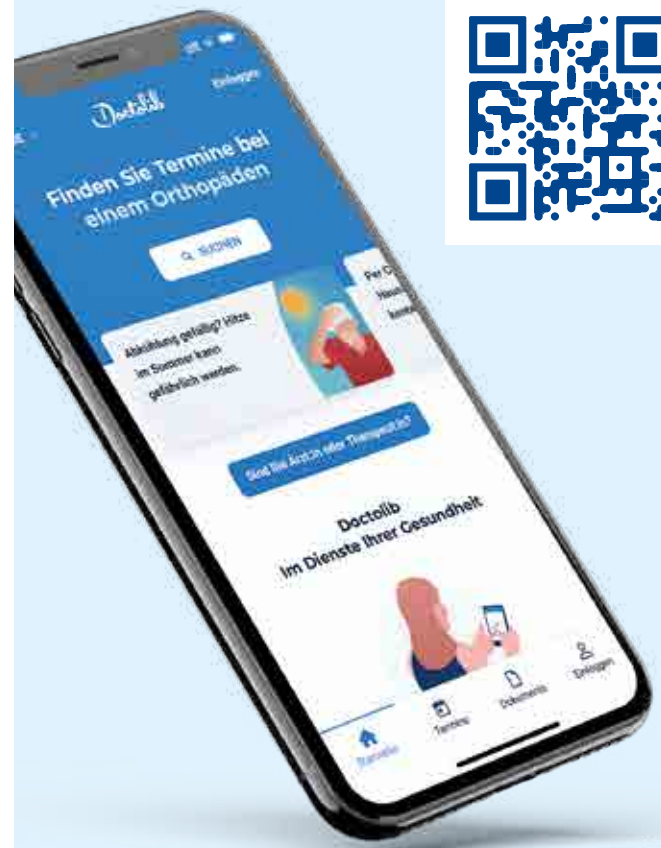
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## From the department

Conservative orthopedics

# Lumbago, herniated disc, or sciatica?

Dr. Stefan Nolte explains the difference  
between back pain

**A**nyone who has ever suffered from severe back pain is all too familiar with terms such as slipped disc, sciatica, and lumbago. But what exactly do these painful conditions involve? In an interview with Hellersen Insight, Dr. Stefan Nolte, Chief of Conservative Orthopedics at the Deutsches Wirbelsäulen- und Skoliosezentrum, explains the difference between these common back problems.



### Herniated discs – Pain originating in the spine

The intervertebral discs are the flexible cushions of the spine that lie between the individual vertebrae. They ensure mobility and act as shock absorbers during everyday movements. A disc consists of two parts: the stable outer fiber ring and the soft, elastic core. The fiber ring protects the disc and maintains its shape, while the cartilaginous core ensures that the spine retains its flexibility.

A herniated disc occurs when the soft core of a disc protrudes through a tear in the outer fiber ring. “This herniated disc is usually painful because the protrud-

ing nucleus comes into contact with the surrounding nerve roots and causes inflammation,” explains Dr. Stefan Nolte. The tissue of the nucleus of the intervertebral disc is very aggressive and promotes inflammation.

### Ischialgia – When the sciatic nerve is inflamed

Sciatica literally means “pain along the sciatic nerve.” This nerve runs from the lower back to the leg and can cause severe pain when inflamed. The sciatic nerve itself is formed by six nerve roots—five originate from the lumbar spine, and the sixth is the first sacral nerve. These roots bundle together



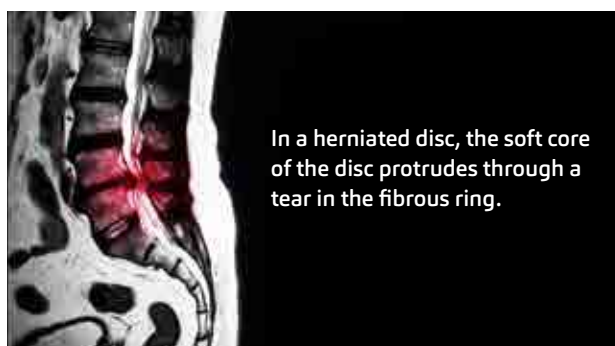
**“At the beginning, we usually use conservative measures to treat the inflammation directly at the site of the herniated disc.”**

**Dr. Stefan Nolte**  
Chief of Conservative Orthopedics

to form a nerve strand, the sciatic nerve. A common trigger for inflammation of this nerve is a herniated disc, in which the disc nucleus presses on one of the nerve roots and causes inflammation there.

Dr. Stefan Nolte explains: “When the nucleus pulposus protrudes and comes into contact with one of the nerve roots, this causes severe inflammation, which triggers the pain. Depending on which nerve root is affected, the pain can radiate to different parts of the leg, such as the thigh, buttocks, or even down to the foot.”

The treatment of sciatica aims to combat the inflammation of the affected nerve and thus relieve the pain. “At the beginning, we usually use conservative measures to treat the inflammation directly at the site of the herniated disc,” explains Dr. Stefan Nolte. This can be done with targeted injections containing anti-inflammatory drugs such as cortisone with an anesthetic. The aim of this therapy is to reduce the inflammation so that the nerve can recover and the pain subsides.



Protective reflex-induced poor posture (lumbago)

### Lumbago – a protective reflex of the body

A lumbago is characterized by acute, sudden pain in the back. Unlike a herniated disc, this is usually a protective reflex of the body. “The body reacts to a micro-injury of the intervertebral disc with a severe muscle spasm to stabilize the affected segment of the spine and protect it from further damage,” explains Dr. Stefan Nolte. This spasm is painful and can make movement almost impossible.

“Some patients confuse lumbago with a herniated disc, but it's not the same thing. Lumbago can be caused by a micro-injury to the intervertebral disc and does not necessarily lead to a herniation,” explains the chief physician. In many cases, lumbago heals on its own, but targeted treatment can help relieve the pain more quickly. ▮

**“Some patients confuse lumbago with a herniated disc, but it's not the same thing. Lumbago can be caused by a micro-injury to the disc and does not necessarily lead to a herniation.”**

**Dr. Stefan Nolte**  
Chief of Conservative Orthopedics

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From the department

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Knee surgery and sports traumatology

## Last resort for your own knee

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How leg axis correction can help to  
preserve the knee joint for as long as possible



**M**any patients come to the Sportklinik Hellersen concerned that their knee joints will no longer be able to withstand the stresses and strains of everyday life. However, thanks to the high level of expertise of the medical staff and the interdisciplinary cooperation between the departments, they can be sure that an endoprosthesis will only be considered at the specialist clinic once all joint-preserving measures have been exhausted. Modern medicine makes it possible to preserve your own knee joint for as long as possible. Dr. Volker Stoll, Chief Physician for Knee Surgery and Sports Traumatology, explains in an interview what role leg axis correction plays in this.

## When is leg alignment correction necessary?

*Dr. Volker Stoll:* Leg axis correction gives us the opportunity to preserve the knee joint. Patients often come to us at the Sportklinik Hellersen believing that they absolutely need an artificial knee joint. However, during the examination, we often find that the knee is still largely intact and only one part, for example the inner side, is worn. The outer side is often still in good condition. In such cases, leg axis correction allows us to shift the load from the worn inner side slightly to the outside. Many patients report that they have hardly any discomfort in their everyday lives after the procedure. This differentiated treatment option is an excellent way of delaying the use of an endoprosthesis, which should always be the last resort.

## Are there differences in leg axis corrections?

*Dr. Volker Stoll:* Yes, there are differences depending on whether a patient has bow legs or knock knees. When correcting leg alignment, it is crucial to determine exactly where the misalignment is.

In the case of bow legs, the misalignment is often located in the area of the tibial head. In such cases, the correction is performed on the tibial head. In the case of knock knees, however, the misalignment is usually located in the thigh. In this case, we perform the leg axis correction on the thigh.

Accurate diagnosis is crucial in order to tailor the procedure to the individual patient and achieve the best possible result.

## What is the procedure and how does the operation work?

*Dr. Volker Stoll:* The procedure usually takes about an hour. The lower leg is sawed at the appropriate place and carefully opened up to correct the leg axis. We then fix the new position with a small, very light titanium plate, which is secured with angle-stable screws.



**“Accurate diagnosis is crucial here in order to tailor the procedure to the individual and achieve the best possible result for the patient.”**

**Dr. Volker Stoll**  
Chief Physician of Knee Surgery and Sports Traumatology

Once the bone cut has completely healed, the plate can usually be removed after about a year. The entire process is easy to plan and, in most cases, leads to a significant improvement in symptoms.

## How quickly do patients recover after such an operation?

*Dr. Volker Stoll:* Patients can get up and move their knee joint on the day of the operation. However, weight-bearing is limited to a maximum of 10 kilograms for the first six weeks. After this phase, we carry out a follow-up examination. If everything has healed well, patients can gradually increase the weight they put on their knee..

Approximately 8 to 10 weeks after the procedure, you will be able to put your full weight on your knee again and move around without walking aids in everyday life. However, as the statics of the leg





Before leg axis correction



After leg axis correction



**“The entire process is easy to plan and in most cases leads to a significant improvement in symptoms.”**

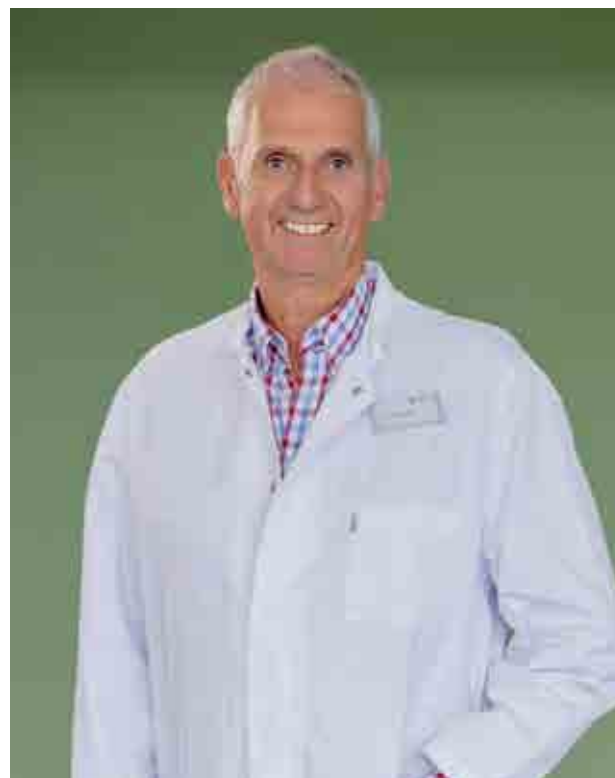
**Dr. Volker Stoll**  
Chief Physician of Knee Surgery and Sports Traumatology

have changed, it is important to undergo targeted muscle-building and coordination training afterwards. Patients usually feel the greatest benefits of the operation after six to twelve months.

#### **Can I completely avoid an artificial joint with a leg axis correction?**

*Dr. Volker Stoll:* Yes, that is entirely possible. Strengthening specific muscles and relieving pressure on the joint can help to significantly delay the need for a prosthesis. It is particularly important to treat the joints more gently and reduce strain as we age, as the demands placed on the joints change compared to when we are younger. However, if it becomes necessary to insert an endoprosthesis at some point, this can be done at any time. Thanks to close cooperation and intensive interdisciplinary exchange with the endoprosthetics department, individual solutions can be found. With knee prostheses, a distinction is made between a total prosthesis and a partial prosthesis, known as a sliding prosthesis. The sliding prosthesis is used when only part of the knee joint, usually the inner

side, is affected by wear and tear and needs to be replaced with an artificial joint. This requires that the opposite side does not yet show advanced cartilage damage and that the cruciate ligament is intact. In these cases, partial prostheses can be used before a complete joint replacement becomes necessary. As people are living longer today, we need to develop differentiated solutions that enable patients to remain active into old age.



## Brief profile

Dr. Volker Stoll  
Chief of Knee Surgery and Sports Traumatology



The Sportklinik Hellersen employs numerous luminaries from various orthopaedic fields who work together to provide patients with first-class care at the highest medical level. One of them is Dr. Volker Stoll, Chief Physician of Knee Surgery and Sports Traumatology, who is celebrating his 30th anniversary this year at the specialist clinic for orthopedics, trauma surgery, sports medicine, and endoprosthetics. Team sports, especially ball sports, have shaped his life and career from the very beginning. After graduating from high school, the now chief physician decided to remain loyal to sport and realize his dream of one day working at the Sportklinik Hellersen, which was already familiar to him at the time.

Since then, the physician has found his daily work with athletes particularly fulfilling, as the advances in his treatment methods also benefit non-athletes. His focus is on the use of minimally invasive procedures that enable a quick return to normal performance. Thanks to gentle surgical methods, longer hospital stays are often no longer necessary and many patients can be treated on an outpatient basis.

### 3 questions ...

**Which sporting greats have you had the privilege of coaching during your career at Sportklinik Hellersen? Who has inspired you the most?**

*Dr. Volker Stoll:* During my career, I have had the privilege of working with numerous outstanding athletes from a wide range of disciplines, including professional soccer players, national coaches, world champions in cycling, pole vaulters, ski jumpers, golfers, and national volleyball players. These experiences have been enriching and exciting, and it is always a pleasure to accompany athletes on their road to recovery. However, I have been particularly moved by the athletic development of my own children.

My daughter plays volleyball in the third Bundesliga and my son is a professional soccer player, currently in the second Bundesliga. Both of them have brought me even closer to my passion for sports. My son, who is also studying medicine, has

been a particular inspiration to me—even though I've unfortunately had to provide him with medical care a few times.

### **What do you think makes Sportklinik Hellersen unique?**

Dr. Volker Stoll: The Sportklinik Hellersen is unique due to its comprehensive expertise in orthopedic treatment. Thanks to the excellent cooperation between the departments—from internal sports medicine to conservative orthopedics and surgical procedures—we can offer comprehensive care that enables our patients to quickly return to their usual level of activity. Our high level of expertise and interdisciplinary exchange make us an outstanding clinic that benefits both patients and the doctors treating them.

### **What advice would you give to young doctors who want to pursue a career in your field?**

Dr. Volker Stoll: It can be difficult to get a place at university at first, but anyone who is interested in this fascinating subject should not be discouraged. There are always ways to get a place, for example by studying abroad. This requires a certain amount of flexibility and willingness, but it pays off in the long run. It also makes sense to engage intensively with the subject area during your studies. Internships and work shadowing in specialized clinics offer the opportunity to gain valuable insights and initial experience. It is particularly important to find a job that you enjoy. If you enjoy your work, it often doesn't feel like work at all.



Chief Physician Dr. Volker Stoll together with his son.

### **Curriculum vitae**

- Studied medicine in Marburg and Münster
- Training at the Clemens Hospital teaching hospital in Münster
- 1995: Joined the Sportklinik Hellersen as a specialist in surgery
- 1999: Qualified as a specialist in orthopedics
- 2002: Qualified as a specialist in orthopedics and trauma surgery
- 2002: Appointed Chief Physician of the Surgical Orthopaedics Department at Sportklinik Hellersen, specialising in knee surgery and sports traumatology

## Insight

#TeamPhysiotherapist

With professional expertise and heart,  
we improve quality of life.



**T**he physiotherapy department at Sportklinik Hellersen is the first point of contact for patients seeking support after surgery, for chronic conditions, or as part of outpatient therapy. Under the direction of Axel Hellner, the 20-strong team ensures that every patient receives exactly the treatment they need to get back on their feet quickly. The focus is on individual care to improve the quality of life of patients. The team works closely together and tailors the therapy to the specific needs of each patient – always with the aim of enabling a speedy and effective recovery.



Divided into three areas, the physiotherapy department at Sportklinik Hellersen offers tailor-made treatment approaches for the different requirements of patients. The first area, post-operative physiotherapy, focuses on providing patients with rapid and targeted care after surgery. The emphasis here is on pain relief and gentle mobilization to promote healing and quickly restore mobility. The second area, inpatient physiotherapy, is specifically designed for patients who have not undergone surgery. It offers targeted support for people with orthopedic complaints or chronic pain within the framework of conservative orthopedics and special pain medicine who have been admitted to the Sportklinik Hellersen as inpatients. Here, individual treatment approaches are used to ensure that pain is relieved in the long term and mobility is improved step by step. The range of services is rounded off by outpatient physiotherapy, which enables particularly flexible and individually tailored care – without the need for an inpatient stay.

### Postoperative physical therapy: Early mobilization for a quick recovery

In order to promote the healing process in the best possible way, post-operative physiotherapy focuses on immediate and targeted care after surgery. Treatment does not begin after a few days, but rather with the first mobilization. This early intervention is crucial for quickly restoring patients' mobility and optimizing the healing process. Here, a team of six specialists helps patients get back on their feet quickly.

“The therapy is based on specially developed, standardized programs that were created in close cooperation with the chief physicians,” explains deputy therapy director Dirk Vollmann. These programs are stored in the clinic software, allowing the attending physician to access the appropriate measures. There is a defined standard program for each diagnosis, which is requested individually. If adjustments are necessary in individual cases, these are discussed with the attending physicians and the entire team to ensure that the therapy is tailored precisely to the patient's needs.



**“This close collaboration ensures that each patient receives individual care and the best possible support on their road to recovery.”**

Axel Hellner  
Head of Physiotherapy

Another important part of therapy planning is regular visits. The entire interdisciplinary team—consisting of doctors, nurses, and physical therapists—talks with the patient together. This gives everyone involved the opportunity to document progress, review therapy goals, and make any necessary changes at short notice. “This close cooperation ensures that each patient receives individual care and the best possible support on their road to recovery,” says Axel Hellner, emphasizing the importance of collaboration within the interdisciplinary team.

For Dirk Vollmann and his team, working in the inpatient ward is more than just a job—it is a challenge that is also incredibly motivating. “It is incredibly rewarding to help people during this crucial phase of their recovery—and that is why we do this job,” he explains.

## Inpatient physical therapy: Individual and group therapy for orthopedic and pain patients

Inpatient physiotherapy in House 2 is provided for patients from conservative orthopedics and special pain medicine. Treatment includes both individual and group therapies that are tailored to the individual needs of each patient. The three-person team of therapists professionally implements the therapy units prescribed by the doctors and accompanies patients on their journey to greater mobility and freedom from pain.



## Outpatient physical therapy: Long-term care for a better quality of life

Whether after an injury, an operation or for musculoskeletal complaints, outpatient physiotherapy at Sportklinik Hellersen helps patients regain their mobility quickly. With individually tailored therapy and training concepts tailored to the patient's specific condition and performance level, the experienced team of eight physiotherapists and two staff members ensures effective and targeted treatment. "Unlike conventional practices, we are specialists in orthopedics and surgical sports traumatology,"



emphasizes Susanne Böning, technical director of outpatient physiotherapy. Axel Hellner adds: "Our strength lies in the specialized follow-up treatment of procedures that are performed here on an outpatient basis. We are able to provide optimal care for these patients."

However, outpatient physiotherapy at Sportklinik Hellersen is not only available to patients who have undergone surgery. Outpatients with chronic complaints or acute orthopedic problems also find competent support here, regardless of which doctor issues the corresponding prescription. The wide range of therapies includes various types of fascia therapy, trigger point therapy, and manual therapy, which enable targeted and individually tailored treatment. In addition, the team offers specialized support in neurological therapies such as PNF (proprioceptive neuromuscular facilitation), for which three therapists are specially qualified.

The offer includes both individual treatments and small group training sessions on medical training equipment. This ensures that personal support is always guaranteed: expert physiotherapists create individual training plans, monitor the exercises, and continuously adapt them to the progress of the patients.

## Support every step of the way

### Recovery

The physiotherapy department at Sportklinik Hellersen offers patients comprehensive care ranging from acute treatment to long-term aftercare. While inpatient care focuses on intensive support immediately after surgery, outpatient care offers the opportunity to treat patients over a longer period of time – often several months. “Someone who has had a knee or hip replacement, for example, often only stays in the inpatient ward for a few days. In outpatient therapy, however, we accompany these patients for six months and thus experience the entire healing



process much more intensively,” explains Susanne Böning, who has been working at Sportklinik Hellersen for 34 years. This close support not only creates a special relationship with the patients, but also allows us to respond specifically to progress and improve their quality of life in the long term.

Patients often begin treatment before surgery, for example due to pain or restricted movement. After surgery and subsequent rehabilitation, many return to outpatient therapy at Sportklinik Hellersen to continue their follow-up treatment. “Some patients even go through all three stages: conservative therapy, inpatient treatment, and outpatient physiotherapy,” explains Axel Hellner.

**“Therapy concepts are constantly evolving. That's why it's important to remain open to new methods.”**

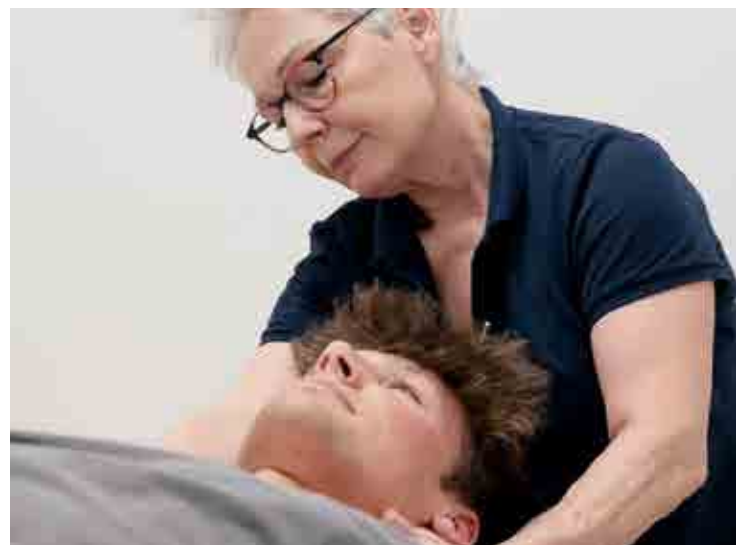
Susanne Böning

Technical Director, Outpatient Physiotherapy

### Always up to date with further training

Continuing education and ongoing exchange are crucial in physical therapy in order to keep pace with the latest developments. “Our profession is very training-intensive because new findings and methods are constantly emerging. You simply have to keep up,” explains physiotherapist Susanne Böning. That's why #TeamPhysio uses a variety of sources – from trade journals and studies to regularly attended training courses – to continuously develop their skills. Follow-up treatment concepts are also regularly reviewed and compared with approaches from other clinics in order to optimize our own procedures. “Especially in rare or complex cases, we conduct intensive research and tailor our concepts to provide the best possible therapy,” she adds.

A central component of the training courses is direct exchange with colleagues from other practices and clinics, which provides new perspectives and impetus for one's own work. “Training courses enable us





**“It is important to set realistic goals for patients that are achievable so that there is no disappointment and no unrealistic promises are made.”**

Axel Hellner  
Head of Physiotherapy

to learn about new approaches and share experiences that enrich our work,” explains Susanne Böning: “Therapy concepts are constantly evolving, so it is important to remain open to new methods.” Colleague Dirk Vollmann aptly adds: “You have to keep your finger on the pulse.”

### **From setbacks to progress and a better quality of life**

Relapses are also part of the healing process and are an emotional setback for many patients. In such moments, according to #TeamPhysio, it is important to analyze the causes, adjust the therapy, and encourage the patient. Open communication and a realistic view of progress strengthen trust and enable everyone to continue working together. “Even with chronic pain patients, there is always something that can be done to make life easier,” explains Susanne Böning. “Sometimes it's about maintaining the best possible

quality of life. Small steps forward are often just as valuable, and patients appreciate that.” Axel Hellner adds: “It is important to set realistic goals for patients that are achievable so that there is no disappointment and no unfulfillable promises are made.”

It is an incredible feeling for the entire team to see a patient smile again after a difficult operation because they have made progress. “And that is the real reward—knowing that you are helping people improve their quality of life. That is exactly what makes working in physical therapy so fulfilling,” emphasizes Dirk Vollmann. ■

**“And that's the real reward—knowing that you're helping people improve their quality of life. That's what makes working in physical therapy so fulfilling.”**

Dirk Vollmann



From the department

Endoprosthetics

# The endoprosthesis as hope for rheumatism patients

Back to mobility and quality of life



**C**hronic joint pain, restricted movement, and exhaustion—rheumatic diseases are often chronic conditions that occur in episodes, with symptoms becoming increasingly severe. In an interview with Hellersen Insight, Bernd Irlenbusch, Senior Consultant in Endoprosthetics, talks about the particular challenges and risks involved in treating rheumatism patients with artificial joints and explains how technological advances in endoprosthetics have significantly improved surgical treatment options.



X-ray images of a 40-year-old female patient with rheumatoid arthritis inadequately controlled by medication: While the X-ray image shows a closed joint space on the outside, the MRI reveals a pronounced bone defect (rheumatoid cyst) on the outer head of the tibia. These bone erosions are typical of severely inflamed rheumatoid joints. In this case, an endoprosthesis was necessary to preserve the joint.

### What role do endoprostheses play in the treatment of patients with advanced rheumatism?

Bernd Irlenbusch: Similar to osteoarthritis patients, the role of endoprostheses in rheumatism is clear: to prevent disability and immobility. Artificial joint replacement, especially in the hip and knee, restores mobility and prevents rheumatism patients from becoming dependent on care.

### Are there certain “subtypes” of rheumatism or disease progression that require earlier or later intervention with endoprostheses?

Bernd Irlenbusch: Rheumatology, like orthopedics or neurology, is a separate field with numerous diseases that are classified into different categories. More than 100 different rheumatic diseases are known, each of which must be specifically differentiated and treated individually. These include, for example, rheumatoid arthritis in adults, psoriatic arthritis, and juvenile arthritis in children. If left untreated with medication, the first two can quickly lead to joint destruction and thus to a corresponding loss of function, immobility, and disability. The group of juvenile rheumatic diseases that affect children and adolescents often show such advanced joint damage by the age of 20 or 30 if they do not respond to drug therapy that only surgical treatment is possible.

In general, it can be said that rheumatism patients require artificial joint replacement about 10 years earlier than osteoarthritis patients.

**“Artificial joint replacement, especially in the hip and knee, restores mobility and prevents rheumatism sufferers from becoming disabled and dependent on care.”**

**Bernd Irlenbusch**

Senior Consultant in Endoprosthetics

### What progress has been made in endoprosthesis technology to better meet the needs of patients with rheumatism?

Bernd Irlenbusch: Advances in endoprosthetics have also greatly benefited rheumatism sufferers, as they offer two significant advantages.

Firstly, we can fit patients with endoprostheses earlier, as improvements in replacement surgery mean that these operations can now be performed more frequently. In the 1980s, this was still a major problem: endoprostheses could often only be re-



X-rays of a 70-year-old female patient with long-standing chronic arthritis: The pronounced bowlegs with a 30° varus deformity indicate advanced joint destruction. Correction and straightening were only possible with the use of a coupled hinge prosthesis. (Before and after comparison).

placed once, and patients who needed a prosthesis at a young age, around 30 or 40, often had to wait until they were 60 to receive treatment. Modularity, i.e., the ability to adapt an implant to individual circumstances during surgery, enables us to treat rheumatism patients earlier and better, even in cases of bone defects.

On the other hand, in the 1980s and 1990s, implants were often fixed with bone cement in rheumatic patients, as they generally have very soft bones. This has changed today. Cementless endoprostheses represent an advance in that they are easier to replace. The two main advances are therefore modularity and improvements in cementless implants.

## How do you assess the risk of endoprosthesis in patients with underlying rheumatoid disease compared to patients with other orthopedic conditions?

Statistically speaking, the revision rate, i.e. the need for follow-up surgery for hip replacements, is 1.6 times higher in rheumatism patients than in non-rheumatism patients. Particular attention should be paid to the infection rate, which is almost twice as high in rheumatism patients, at 1.8 times higher.

The increased susceptibility can be attributed to several factors. On the one hand, the immunosuppressive drugs that rheumatism sufferers often take play a role. These drugs deliberately weaken the immune system, but also lead to a higher susceptibility to infection. On the other hand, skin problems (psoriasis, cortisone skin) are an additional complication, which are associated with an increased risk of infection. Finally, rheumatism sufferers often have “softer” bones as a result of osteomalacia or osteoporosis, which makes it more difficult for the implant to anchor itself in the bone or heal properly.

As in other surgical fields, the complication rate decreases with the increasing experience of the surgeon. Rheumatism patients should therefore seek treatment at a center with surgeons who have expertise in rheumatic surgery.



# Guidebook

## Recipes

### Mushroom pan

#### with lettuce hearts and ricotta sour cream dressing

Preparation time approx. 25 minutes

Ingredients for approx. 2 servings:

- 600 g fresh mushrooms (e.g., button mushrooms, herb oyster mushrooms)
- 1 clove of garlic
- 1 bunch of chives or spring onions
- 1 lemon
- 2 romaine lettuce hearts
- Olive oil
- 2 tbsp butter
- 1 tsp honey
- 150 g ricotta
- 50 g sour cream

- Salt and pepper

#### Preparation:

1) Prepare the lettuce hearts: Quarter the lettuce hearts, wash and dry thoroughly.

**2) Prepare the mushrooms and garlic: Clean the mushrooms and cut into bite-sized pieces if necessary. Finely chop the garlic. Squeeze half a lemon.**

**3) Ricotta and sour cream dressing: Mix the ricotta and sour cream in a bowl. Season with**



**a little salt and pepper.**

**4) Fry the mushrooms: Heat the olive oil in a pan and fry the mushrooms for about 10 minutes until golden brown. Then add the garlic, butter, honey, and lemon juice. Fry for another 5 minutes, stirring regularly.**

**5) To serve: Arrange the prepared lettuce hearts decoratively on a plate and drizzle with the ricotta and sour cream dressing. Place the mushrooms in the middle of the plate.**

**6) Serve: Garnish with fresh herbs or a little lemon juice to taste.**



# Savory

## puff pastry swirls

Perfect for a quick snack or as a party treat!

Ingredients for the base:

- 1 roll of ready-made puff pastry (from the refrigerated section)
- Plain cream cheese
- 1 red bell pepper
- 2 spring onions
- Grated Emmental cheese
- Spices of your choice (e.g., salt, pepper, chili)

**Optional ingredients:**

- Salami
- Ham
- Tuna
- Various vegetables of your choice

### Preparation:

1) Prepare the puff pastry: Roll out the puff pastry and place it on a flat surface.

2) Season the cream cheese: Stir the cream cheese until smooth and season with salt, pepper, and a pinch of chili. Spread the cream cheese evenly over the entire surface of the puff pastry.

3) Prepare the filling: Chop the bell pepper and spring onions into small cubes. Chop any other optional ingredients, such as salami, ham, or vegetables, into small pieces.

4) Spread the filling: Spread the prepared ingredients evenly over the cream cheese layer. Finally, sprinkle with grated Emmental cheese.

5) Roll up the puff pastry: Roll up the dough as tightly as possible and cut into slices about the thickness



of your thumb using a sharp knife.

6) Bake: Place the slices on a baking sheet lined with parchment paper and bake in a preheated oven at 200 degrees Fahrenheit for about 15 minutes until golden brown.

*Enjoy your meal!*



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**“There are always moments that make me happy—whether it's when we can calm children down, help patients after an injury, or laugh together about a funny situation.”**

However, it is also true that destructive or dissatisfied employees—the “bad apples”—must be consistently removed to prevent the good apples from spoiling as well.

**What are your goals for the coming years in your position as Chief Physician of Shoulder, Elbow, Knee Surgery, and Traumatology, and how do you intend to achieve them with your team?**

My goal is to further strengthen the clinic both regionally and nationally and to have the department certified in various areas. I would also like to see the surgeons individually certified. The training of our employees is particularly close to my heart. We need a new generation of specialized surgeons to meet our high standards in the years to come. At the same time, it is important to successfully lead the clinic into the modern age and meet the challenges of health policy—and I am convinced that we are on the right track.

**What is particularly important to you in your work?**

Medicine is an incredibly exciting field of work. We work for and with people, can be scientifically active, and combine this with a manual component. It is particularly fulfilling to achieve directly visible, mostly very positive results in surgery—both for the patient and for ourselves. It is a joy to help patients return to their everyday lives and careers and to receive their gratitude in return.

## 3 questions for...

When the opportunity arose in 2009 to take up a position at the Sportklinik Hellersen, the decision was an easy one for him due to his particular interest in joint and bone surgery. He returned to his home region together with his young family. His connection to the Sportklinik Hellersen goes back a long way: in the early 1990s, the current chief physician completed his nursing internship at what was then the Sportkrankenhaus Lüdenschheid.

**How do you ensure a positive working environment in #TeamHellersen?**

For a long time, medicine, especially surgery, was characterized by traditional hierarchical management and control structures—structures under which I myself was trained. A certain degree of hierarchy remains necessary because medical responsibility is clearly defined. Nevertheless, I am convinced today that, as in any successful company, satisfied employees are the key to genuine performance.

It is important to ask yourself: What can I exemplify and what does my counterpart need? Learning happens through role models. Values such as friendliness, humor, self-irony, and appreciation, coupled with a leadership style that asks questions, enables participation, and delegates responsibility, create a positive working atmosphere. Politeness and respect are essential.

Training and creating prospects for the future career are, in my opinion, the key drivers of shared success. I don't believe in the concept of work-life balance in the traditional sense. Instead, I am convinced that work that brings joy is the most important pillar of a fulfilling life, after family and health. When performance is recognized and valued beyond this—and this does not have to be financial in nature—an environment is created in which people enjoy working.



## “This operation has a very good success rate.”

**Dr. Markus Leyh**

Chief of Shoulder, Elbow, Knee Surgery and

Traumatology

The procedures are performed using minimally invasive arthroscopy or with an additional four-centimeter skin incision (mini-open). This allows us to stabilize the joint in all directions of instability and achieve very good results.

That sounds like the injury can be treated well.

Dr. Markus Leyh: Partly. The timing of the diagnosis is crucial. And that's where we have a very big problem: as I said, in the case of an acute tear, we have to operate within two weeks. However, some patients come to us too late. The acromioclavicular joint was injured or ruptured, but it was not noticed immediately. Then the patients only come to us at the Sportklinik Hellersen four or five months later. The procedure mentioned above can then no longer be used and tendon plasty is necessary.

What does the tendon plasty procedure involve? Dr. Markus Leyh: We remove a tendon, usually from the knee joint, and use it to reconstruct the ligaments of the shoulder joint—similar to cruciate ligament reconstruction in the knee. Although it is a more extensive procedure, it is an effective treatment for chronic instability.

So much for the treatment. But how does a shoulder joint rupture occur in the first place? Dr. Markus Leyh: The cause is usually a massive impact, often resulting from a fall. The injury typically occurs in athletes and is caused by an accident in which the person falls directly onto their shoulder or breaks their fall in a certain way. The force is transferred via the upper arm to the small joint, tearing it apart.

## Brief profile

**Dr. Markus Leyh**  
Chief of Shoulder, Elbow, Knee Surgery and Traumatology



Excellent surgical expertise, many years of experience and a management style that impresses with clarity, team spirit and vision – that's what Dr. Markus Leyh stands for. As Chief Physician, he heads the Department of Shoulder, Elbow, Knee Surgery and Traumatology at the Sportklinik Hellersen. His goal: to offer patients first-class, modern medical care.

Dr. Markus Leyh studied medicine in Düsseldorf, Sheffield (UK), and Aachen before beginning his internship at a teaching hospital at Charité – Campus Virchow in Berlin. After successfully obtaining the specialist title in surgery, which at the time included training in abdominal, thoracic, vascular, and trauma surgery, he became interested in specialized orthopedics and trauma surgery. Visceral tumor surgery would also have been an alternative for him. This formative and valuable early training in general surgery laid the foundation for his further professional development.

His growing interest in bone and joint surgery led him to the Berlin Marzahn Accident Hospital, the Jewish Hospital in Berlin-Mitte, and temporarily to the orthopedics department of the Hessing Foundation in Augsburg. He obtained a specialization in trauma surgery and, after completing his reformed further training, became a specialist in orthopedics and trauma surgery.

### And this small joint can withstand that?

Dr. Markus Leyh: More or less. Since the entire arm hangs on the small acromioclavicular joint, it is prone to wear and tear and is often affected by osteoarthritis. Basically, almost every older person has acromioclavicular joint osteoarthritis, but only very few have such serious problems that they require treatment or surgery. Conservative treatments include pain therapy, trigger point therapy, acupuncture, physical therapy, or treatment with injections into the joint. If surgery is necessary due to instability and inflammation and bone contact occurs, the shoulder joint is removed arthroscopically (minimally invasive). It is milled out to the width of a finger. This operation has a very good success rate.

### What is a shoulder joint dislocation and what are its consequences?

Dr. Markus Leyh: Injuries to the shoulder joint are not uncommon. In a shoulder joint dislocation, the stabilizing structures of the joint tear. We distinguish between six degrees of severity according to Rockwood, with surgery becoming necessary from grade 4 onwards. This classification shows which ligaments are torn and whether the capsule is damaged.

If the joint is "only" unstable in one direction—similar to the movement of a piano key—it is less serious. However, in the case of an acute tear of the joint (grade 4), it is necessary to stabilize the joint within two weeks. In this case, however, the joint is also unstable at the front and back, causing the end



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The capsule is sutured and the ligaments between the collarbone and shoulder blade are reinforced with a cable system. In cases of chronic instability, we remove tendons and reconstruct the anatomy.

of the collarbone to hit the shoulder roof (acromion) and causing pain. During surgery, we push the end of the collarbone back into its original position and stabilize the aforementioned planes of movement.



# The shoulder joint – from wear and tear to dislocation

An expert interview with Dr. Markus Leyh



From the department  
Shoulder, elbow, knee surgery, and traumatology

**A**ctually is. A shoulder joint dislocation is a typical shoulder injury and, along with shoulder joint wear, is treated very frequently by shoulder specialists at Sportklinik Hellersen. In an interview with Hellersen Insight, Dr. Markus Leyh, Chief of Shoulder, Elbow, Knee Surgery, and Traumatology, explains the clinical pictures of the acromioclavicular joint.

**Where exactly in the shoulder is the acromioclavicular joint located, and what is its function?**  
Dr. Markus Leyh: The acromioclavicular joint connects the collarbone to the acromion, a bony part of the shoulder blade. It is the only real joint connecting the entire arm, including the shoulder blade, to the torso. Ultimately, the arm is only connected to the torso via the acromioclavicular joint.



from wear and tear to demolition

# The shoulder joint

AN EXPERT INTERVIEW  
WITH DR. MARKUS LEYH

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