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# Medical Excellence Made in Germany •••



#### **Medical Directors**

**Priv.-Lec. Dr. med. Thomas Meiners**Head Physician, Spinal Cord Injury Centre

**Dr. med. Oliver Meier**Head Physician, Spinal Column Surgery
Centre / German Scoliosis Centre

**Dr. med. Johannes Kutzenberger** Head Physician, Neurourology Department

**Dr. med. Marcus Nehiba** Head Physician, Neurourology Department

**Dr. med. Hassan Taha** Head Physician, Neurosurgery Department

**Dr. med. Lothar Poloczek**Head Physician, Department
of Anaesthesia and Intensive Care

## **Clinic Directors**

**Dr. med. Lothar Poloczek**Medical Director

Gottfried Fischer Nursing Director

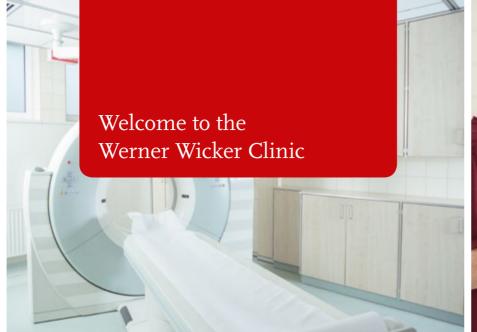
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## Contents

- 4 The Clinic
  First-Class Care
- 6 | Spinal Cord Injury Centre
  Professional Care for Acute Paralysis and Subsequent Injuries
- 8 | Spinal Column Surgery Centre /
  German Scoliosis Centre
  Industry-Leading Musculoskeletal System Expertise
- 10 | Neurourology Department
  Reversing, Alleviating, and Managing Loss of Function
- 12 | Neurosurgery Department

  Excellence and Expertise in a Caring Environment
- 14 Department of Anaesthesia and Intensive Care
  Simplifying Medical Procedures and Avoiding Complications

## The Clinic

### First-Class Care

Founded in 1978, the Werner Wicker Clinic in Bad Wildungen belongs to the privately-owned Wicker Group with nine rehabilitation clinics throughout Germany and two acute care hospitals. More than 3,600 highly-qualified and motivated employees provide outstanding medical care for ca. 4,100 patients from Germany and from other European and non-European countries each year.

This includes more than 30 years of caring for patients from the Arab world and the Golf states. We understand and respect the particular cultural requirements of medical care, treatment, and therapy – and we ensure that these requirements are met, from dietary accommodations to medical care.

#### **Combined Expertise in Five Medical Specialities**

As an orthopaedic clinic, the Werner Wicker Clinic is divided into five speciality departments with superior medical expertise: the Spinal Cord Injury Centre, the Spinal Column Surgery Centre/German Scoliosis Centre, the Neurourology and Neurosurgery departments, and the Department of Anaesthesia and Intensive Care. Our departments each use their vast

experience in traditional and surgical treatment. In cooperation with a related neurology and radiology praxis, we also have the full spectrum of modern diagnostics at our disposal – from computer tomography (CT), angiography, and magnetic resonance imaging (MRI) to neuro-physiological diagnostic procedures (EMG/NLD and EEG).

Our comprehensive treatment and care is imbued with medical and medicinal expertise: physiotherapy, occupational therapy, speech therapy, balneotherapy, athletic and therapeutic exercise, psychological and social services, clinical and chemical services, bacteriological laboratory, and urological functional diagnostics, as well as a central pharmacy.

### **Complex Indications**

- Paralysis (either congenital or due to injury), in particular paraplegia
- Spinal columns abnormalities and deformations
- Disorders of the urinary bladder and other urological functions
- Benign and malignant tumours of the brain and spinal cord
- Abscesses and inflammation of the brain and spinal cord
- Haemorrhages and fluid accumulations in the brain
- Herniated discs
- Narrowing of the spinal canal





## **Holistic Treatment Approach**

Our treatment approach is characterised by a holistic view of our individual patients. That is why interdisciplinary cooperation within the Wicker Group and regular exchanges with accredited domestic and foreign specialists is a matter of course. For us, it is also a matter of the interplay of patient health and satisfaction. From the very start, we include you, the patient, in all of our decisions. We inform you thoroughly about the causes, concomitant factors, and

## »Expertise requires experience.«

risks of your illness, helping to make you a 'specialist in your own health.' We cooperate with you to tailor individual treatment plans and goals. In terms of self-help, we support you in mobilising your own abilities to encourage the rehabilitation process. Even our clinic's atmosphere contributes to your recovery, espe-

cially during longer stays: The Werner Wicker Clinic is located directly adjacent to the largest spa facility in Europe and offers a wide spectrum of services, from a cafeteria and a school to a PC workplace and an indoor swimming pool.

## **Active Participation in Life**

We implement our treatment plans to help grant you a new outlook on life after a severe illness or injury and facilitate your return to an active lifestyle. This can only happen with a team that supports you every step of the way. Because of this, we hold our employees to the highest expert and professional requirements. Many of them are proven experts in their fields of expertise. You will find them to be courteous, understanding, and highly motivated. We set these requirements so that our employees further develop their sense of responsibility and expand their scope of care through continuing education.

## Spinal Cord Injury Centre

## Professional Care for Acute Paralysis and Subsequent Injuries

Paraplegia results from spinal cord injury. In acute cases, this requires immediate assistance. In our Spinal Cord Injury Centre, we stabilise your overall condition and are able to provide surgical treatment for vertebral fractures. Our goal is to maintain joint mobility, manage complications, and increase our patients' independence.

We also treat paralysis and partial paralysis (both congenital and present after initial treatment) – whether it is the result of injury, inflammation, circulatory



## Priv.-Lec. Dr. med. Thomas Meiners

**Head Physician** 

After completing his study of medicine at the Westphalian Wilhelms University of Münster in 1981, private lecturer Dr. med. Thomas Meiners was the assistant physician of surgery for two Westphalian clinics before he began working as an assistant physician of orthopaedics in the Hellersen/Lüdensheid Sports Medicine Clinic in 1984. After working in another position as a research assistant at the Orthopaedic Clinic of Kiel, Mr. Meiners completed the specialist examination for orthopaedics in 1990. That same year, the married father of three came to the Werner Wicker Clinic, where he has been Chief Physician of the Spinal Cord Injury Centre since 1995.





disorders, or adenomas of the spinal cord or spinal column.

Typically, spinal cord injuries lead to a loss of motor, sensory, and autonomic function. This can lead to the loss of all emotional sensitivity, involuntary muscle movement, polysynaptic and proprioceptive reflexes below the level of the lesion, and loss of control of the bladder and colon function. This can lead to

»Our primary goal is our patients' independence and ability to participate in daily life.«

impairment of circulatory, respiratory, and heat regulation processes. As a result, respiration, (neuro) surgical interventions for stabilising the spinal column, or treatment of compromised neural structures is required within the framework of acute care. These losses of function may be especially noticeable in the days and weeks after the spinal cord injury (spinal shock). Eventually, many patients are able to voluntarily control certain functions. For other patients, muscle spasms occur which cannot be voluntarily controlled.

#### Indications

- Congenital paralysis and partial paralysis
- (Partial) Paralysis after injuries, inflammations, circulatory disorders, or adenoma of the spinal cord or spinal column
- Cerebral haemorrhage
- Craniocerebral injuries

## Diagnosing and Treating Paralysis-Related Injuries

After spinal shock subsides, were are able to better assess and treat the injury. Common results are pressure sores, stiffening of the joints, thrombosis, bone fractures, urinary bladder disorders, urinary incontinence, haemorrhoids, and pressure sores, as well as constipation (obstipation). Depending on diagnosis, we decide upon a surgical or traditional treatment.

#### **Treating Craniocerebral Injuries**

After severe spinal cord and brain injuries, we take over interdisciplinary postoperative observation and intensive care treatment – including respiration, if necessary. We have a correspondingly equipped intensive care unit for this purpose.

## **Treating Neural Disorders**

A number of illnesses or congenital disorders of the nervous system, such as multiple sclerosis, spina bifida, polyneuropathy, and poliomyelitis can lead to paralysis. In these cases, we implement orthopaedic treatments meant to maintain joint mobility and improve overall function, such as muscular and tendon transplants in the arms and legs, as well as corrective osteotomy. If needed, we sever bone connective tissues, correct the placement of the bones, and reconnect them in order to improve your mobility. Finally, we implant Baclofen pumps to reduce spasms, if needed.

#### **Non-Surgical Emphases**

According to personal requirements, we may use non-surgical measures in addition to or as an alternative to surgical measures. This includes treatment of joint stiffness (contracture), physiotherapy on a neurophysiological basis for muscle development, traditional treatment for spasms, adjusting the digestive cycle for paralysis of the bowels, and treatment for paralysis of the bladder, as well as the choice of medical aids.

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## Industry-Leading Musculoskeletal System Expertise

The Spinal Column Surgery Centre / German Scoliosis Centre at the Werner Wicker Clinic is one of the largest and most prestigious specialist centres of its type in the world. Our more than 30 years of experience and more than 1,500 surgeries annually ensure your safety while in our care. Partially due to our modern technical equipment, risks during surgery

## »The Head Physician is the brain of our interdisciplinary team of experts.«

at our clinic are no higher than with any other substantial standard orthopaedic surgery. We boast a high rate of success. Even in cases of severe spinal curvature or distortion (scoliosis), we are able to perform spinal readjustments with beneficial medical and cosmetic results. There is no age limit for

our surgeries. We are able to perform major surgeries on patients as young as 14 (or earlier, if needed), and can operate on patients well into old age.

## The Full Spectrum of All Spinal Column Disorders

We treat the full spectrum of spinal column disorders. Based on diagnosis, we may implement non-surgical or surgical treatment measures. Many of the treatments – especially on the cervical spinal column – are standard surgeries and place very little burden on you, the patient.

If possible, the first step is making an appointment during our office hours for scoliosis treatment. During this visit, you will receive a preliminary diagnosis and may begin concrete traditional treatment measures, if desired — such as beginning physical therapy, ordering an orthopaedic girdle, or receiving injections near the spinal cord to alleviate chronic pain. If these measures, especially those in the lumbar spine area, do not lead to sufficient alleviation of your pain, then a wide variety of surgical treatments will be available to you.

#### Indications

- Idiopathic and congenital distortion (scoliosis) and curvature (kyphosis) of the spinal column
- Congenital kyphoscoliosis (combination of kyphosis and scoliosis)
- Rib humps
- Neuromuscular scoliosis, potentially caused by early childhood brain damage (infantile cerebral palsy), paraplegia, malformation of the spinal column (myelomeningocele), and primary muscular disorders
- Scoliosis resulting from systemic diseases such as neurofibromatosis, Marfan Syndrome, chromosomal anomalies, or arthrogryposis
- Spinal column curvature (kyphosis) in conjunction with ankolysing spondylitis (AS), Scheuermann's Disease, fractures, or other congenital half, tilted, and wedged vertebrae
- Other malformations of the spinal column
- Vertebral fractures

### Stabilisation and Mobility

In order to function properly, the spinal column must be as stable and mobile as possible. We adapt our treatments to meet these requirements.

The spinal column's stability can be affected by removing inflamed tissue or tumours, by vertebral fractures, or — as in the case of ankolysing spondylitis — by other deformations. If surgery is required, as in the case of spondylolisthesis or vertebral fracture, we support or replace the affected vertebra with 'cages'-small titanium baskets filled with bone.

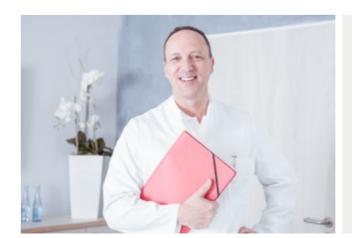
We can achieve precise placement of the screws with the help of the electric signal of a special instrument.



Treatments for achieving mobility include loosening the spinal column before corrective surgery to decompress the vertebrae, or in the case of a herniated disc.

## Safety Via Computer-Supported Patient Monitoring

All treatments during surgery are monitored using modern technology. The screws used for correction and stabilisation are checked on an image converter display, and the spinal cord and spinal nerves are constantly monitored. This reduces the risk of neural damage and facilitates rapid reactions.



## Dr. med. Oliver Meier Head Physician

After studying medicine in Düsseldorf, Dr. med. Meier was first employed by the Werner Wicker Clinic from 1991 until 1993, where he gained his initial experience in spinal column surgery. After completing his residency in trauma surgery and orthopaedics, the married family man returned to the Werner Wicker Clinic in 1996 and took over the Head Physician role in the Spinal Column Surgery Centre in 2007.





## Reversing, Alleviating, and Managing Loss of Function

Often, new injuries, chronic paraplegia, and other neurological disorders lead to injuries of the central and peripheral nervous systems. Consequently, this can lead to neurogenic bladder disorders (NBD), which are predominantly associated with urinary incontinence. We diagnose and treat these complaints and attempt to prevent damage to the urinary tract by recognising risks as early as possible.

We care for ca. 2,250 inpatients and outpatients each year, with 40 beds in two wards, as well as additional beds in our interdisciplinary intensive care unit. You will be cared for by both Chief Physicians, four additional urology specialists, and a dedicated team of 50 medical care providers. Our goal is for you to manage loss of function, such as urinary incontinence, as best as possible so that you can remain independent and continue to lead an active social life.

#### Indications

- Spinal column injury with assessment of the level of paralysis
- Spina bifida
- Multiple sclerosis
- Post-polio syndrome
- Parkinson's disease
- Craniocerebral injury
- Stroke
- Amyotrophic lateral sclerosis (ALS)
- Malformation of the spinal column or pelvis
- Postoperative loss of function

### **Comprehensive Diagnostics**

We have two video urodynamic and two cystometry measuring units. These help us to determine the functional damage to your urinary tract and to measure and assess function during the accumulation and emptying phases. We perform all other diagnostic examinations – imaging procedures such as sonography, computer tomography, and magnetic resonance imaging, as well as provocation tests, including transrectal electrical stimulation. Our diagnostic procedures help us to assess the chance of success of special treatments and to monitor bodily functions to quickly discover risks that may lead to urinary tract infections. Finally, our comprehensive diagnostics build the basis for our neurourologic assessment for insurance purposes.



## **Dr. med. Johannes Kutzenberger** Head Physician

Dr. med. Johannes Kutzenberger has been working at the Werner Wicker Clinic since 1989 and has been Head Physician of Neurourology since 2004. He studied medicine from 1972 until 1978 in Marburg, Germany, and completed his residency in Hannover, specialising in neurourology. After completing his specialist residency in 1988, he practised his specialisation in neurourology. In addition, he incorporates his experience as a medical officer in the Marines.

## The Full Range of Treatment Options

Neurogenic bladder dysfunction (NBD) is generally treated with medication. The goal is retaining regular urine storage in the bladder, achieving continence, and avoiding urinary tract infections. If natural urination is no longer possible, then the patient is instructed to self-catheterize. If these measures are not successful, then minimally invasive surgical treatments are available. In this case, a wide range of endoscopic surgical treatment options are available. Not infrequently, comprehensive surgical measures are unavoidable. This includes implanting synthetic sphincter muscular systems or treatment with penile implants. One of our clinic's areas of expertise is in implanting bladder pacemakers (neuromodulators) and ventral root stimulators, including the use of the intestine to regain lost urinary bladder function.

## Evaluation and Follow-Up Treatment in the Outpatient Clinic

In our outpatient clinic, we make concrete plans to perform the required diagnostic testing and choose appropriate treatment options. Specialised care generally takes place during inpatient stays.

Even after your treatment, our outpatient clinic is your primary source for questions or follow-up care.

Especially in cases of paraplegia with urinary bladder disorders, you should receive lifelong, regular follow-up care.



## Excellence and Expertise in a Caring Environment

Illnesses, malformations, and injuries of the central and peripheral nervous systems and their sometimes drastic consequences are a key issue in matters of the spinal column. In the neurosurgery department, we pool our skill and experience to handle this topic. From the preliminary examination and diagnosis to surgical treatment and rehabilitation, we offer you holistic medical, technical, and therapeutic treatment at the highest level of quality. Our department has a reputation for excellence in the treatment of spinal

# »Our focus is on patient care. Always.«

cord and brain tumours. Interdisciplinary exchange of knowledge with colleagues in other departments, as well as intensive and confident conversation with you, are both important for achieving the best possible outcomes. We want to grant you the opportunity to regain your independence as soon as possible.



## Dr. med. Hassan Taha

## Head Physician

Neurosurgeon Dr. med. Hassan Taha completed his specialist residency at the university hospitals of Düsseldorf and Duisburg. After three years at the municipal clinic of Solingen, he became a senior physician of neurosurgery at the university hospital of Gießen in 2010. Since 2012, the father of one has been head physician of the neurosurgery department at the Werner Wicker Clinic.

## Indications

- Herniated cervical, thoracic, or lumbar disc
- Spinal stenosis
- Benign and malignant tumours, as well as malformations of the brain and cranium, spinal cord, spinal column, and peripheral nervous system
- Traumatic neurological disorders
- Acute or chronic hydrocephalus
- Abscesses and inflammatory processes in the skull and spinal column
- Paediatric neurosurgery
- Pain management

## From Standard Medical Procedures to Complex Surgeries

Our treatment spectrum includes careful surgical removal of benign and malignant brain tumours, abscesses, and inflammations by means of treating different types of haemorrhage, as well as the treatment of pathological increases in fluid retention in the brain (hydrocephalus). For the skull, we are generally concerned with treating traumatic neural disorders such as relieving pressure on the skull due to intercranial haemorrhage, treating skull fractures,

open craniocerebral trauma, or skull reconstruction and malformation, as in the case of Arnold Chiari malformation.

In the areas of the spinal cord and spinal column, we treat tumours, abscesses, and cysts, disorders such as tethered spinal cord syndrome, syringomyelia or myelocele, dysgraphia malformations, narrowing of the spinal canal (spinal stenosis), compromised neural structures, and herniated vertebral discs.

We also treat impingement syndromes and tumours in the peripheral nervous system with professionalism and experience.

## Specific Specialities for Paediatrics and Pain Management

Two other important areas are close to our heart: paediatric neurosurgery and pain management. The latter includes minimally invasive procedures such as neural root block or facet infiltration, implanting pain pumps, spinal cord stimulation, and microsurgical measures, as in the case of treatment for facial pain due to cranial nerve irritation.



# Simplifying Medical Procedures and Avoiding Complications

At the Werner Wicker Clinic, we administer more than 2,800 doses of anaesthesia each year, with more than 1,100 extended spinal column surgeries.

The department is equipped with 4 operating rooms with anaesthesia-administering facilities, artificial



respirators, and monitoring equipment. This ensures a high level of safety for our patients during their surgeries.

After surgery, our patients are observed in 2 observation rooms and, if necessary, are transferred to the intensive care unit. The 26-bed intensive care unit is divided into into 11 beds for spinal column patients, 11 beds for spinal cord injury patients, and 4 beds for neurosurgical and neurourology patients. We are equipped to artificially respirate 14 patients at any given moment.

## Indications

- Patients with borderline respiratory insufficiency
- Paraplegic and tetraplegic patients
- Severe kyphoscoliosis
- Paralytic scoliosis
- Spastic paralysis
- Muscular atrophy
- Muscular dystrophy
- MMC patients
- Neurosurgical patients

## **Treating Advanced Paraplegia**

In the case of advanced paraplegia, artificial respiration, weaning (from artificial respiration machines), setting up at-home ventilation systems, cannula management, and complex airway management, a comprehensive treatment plan is imperative.

This is a large burden for most polymorbid patients, which we attempt to alleviate with our team of physicians, nurses, caregivers, and therapists.

This includes treating, supporting, advising, and educating patients and their loved ones from the acute phase to the recovery phase.

#### **Reducing the Risk of Complications**

Patient safety and comfort are our highest priority. This is especially true during your surgery. A comprehensive survey of medical history, evaluation of clinical findings, physical examination, and additional examinations (if necessary) are imperative for assessing a patient's personal level of risk. In addition to preparation via medications (for stress reduction), an informed consent discussion takes

place, with a special emphasis on alleviating patient's discomfort with anaesthesia.

## **Supervision During Surgery**

While administering anaesthesia, we pay close attention to the patient's perception of pain and sensitivity, monitor all bodily functions such as pulse, cardiac activity, blood pressure, respiration, and blood oxygen saturation. Any disruptions are recognised and handled immediately.

The varying and often highly complex surgical treatments for generally very ill patients are performed by an experienced and synchronised team of anaesthesiologists and nurse anaesthetists.

Immediately after surgical treatment, care is administered in the intensive care unit under supervision of our director of anaesthesiology. In this unit, qualified physicians from the anaesthesiology department provide round-the-clock medical care.



## Dr. med. Lothar Poloczek

## Medical Director and Head Physician

Dr. med. Lothar Poloczek completed his study of medicine at the University of Cologne in 1979.

Afterwards, he completed his residency as a specialist in anaesthesia and special intensive care. Finally, he transferred to the Clinic of Leverkusen – first as an assistant physician, then as a senior physician. From 1986 until 2003, Dr. Poloczek worked at the St. Nikolaus Hospital in Büren/ Westphalia. Since 2004, the father of two has been head physician of the department for anaesthesia and intensive care at the Werner Wicker Clinic in Bad Wildungen.



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