# Department of Physical Medicine and Rehabilitation

### **Happy Valley**

Hong Kong Sanatorium & Hospital

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#### **Service Hours**

Monday to Friday: 9:00 am - 5:00 pm

Saturday: 9:00 am - 1:00 pm

Closed on Sundays and Public Holidays

Consultation by Appointment

For enquiries and appointments, please contact us







物理醫學及復康科部

Physical Medicine and Rehabilitation is a medical specialty aiming to restore the health and functional abilities of people after disease and injury such as stroke, spinal cord injury, amputation, nerve injury, joint replacement, spinal pain or other chronic pain conditions. Through diagnosis, evaluation and medical management, our interdisciplinary team works together to help patients increase their function ability, alleviate pain and disability, and maximise performance at work, in school, during recreation and in all other aspects of life.

The Department of Physical Medicine and Rehabilitation provides comprehensive consultation, special diagnostic and rehabilitative services through the coordinated efforts of its medical specialists and therapists. Inpatient rehabilitation beds are available with special emphasis on the rehabilitation needs of patients with acquired brain injury, stroke, spinal cord injury, neuromuscular conditions, orthopaedic conditions and chronic pain conditions. Outpatient services are available at the Rehabilitation Centre located at the 5/F of Li Shu Pui Block, which include:

- 1. Comprehensive Rehabilitation Consultation
- 2. Electrodiagnostic Examination
- 3. Physiotherapy
- 4. Occupational Therapy
- 5. Speech Therapy
- 6. Orthotics and Prosthetics
- 7. Clinical Psychology
- 8. Dietetic Service

# Multidisciplinary Programmes Electrodiagnosis Examination



Our Electrodiagnosis Laboratory is the only laboratory in Hong Kong where all electrodiagnostic tests are fully conducted by our Electrodiagnostic Medicine Specialist certified by the American Board of Electrodiagnostic Medicine and the Canadian Society of Clinical Electrophysiologists according to the American Association of Neuromuscular and Electrodiagnostic Medicine Practice Guidelines.

Wide-ranging examinations are conducted in the laboratory, including nerve conduction studies, neuromuscular junction studies and needle electromyography. These examinations are conducted for the diagnoses of peripheral nerve and muscle disorders such as carpal tunnel syndrome, ulnar nerve and other peripheral nerve entrapment, radiculopathy, plexopathy, peripheral nerve injury, facial nerve palsy, diabetic and other forms of hereditary and acquired peripheral neuropathy, myasthenia gravis, amyotrophic lateral sclerosis, progressive muscular atrophy, polymyositis and other forms of myopathy, as well as disorders such as Guillain-Barré Syndrome.

### **Stroke Rehabilitation**

Recovering from a stroke can be one of the greatest challenges an individual will ever face. Medical research studies show that early and specialised stroke rehabilitation under the guidance of an interdisciplinary team can help optimise patients' physical and cognitive recovery, improve functional independence and enhance quality of life. Studies also indicate that where a stroke patient goes for treatment and rehabilitation can make all the difference in his or her recovery. HKSH delivers a comprehensive programme of medical, nursing and therapy care to meet the individual needs of each stroke patient.

#### **Treatment Goals**

- Restore physical function and enhance the required skills for daily activities
- Build muscle strength, improve balance and regain mobility
- · Improvement in speech, swallowing and nutrition
- Address cognitive, emotional or behavioural issues and develop new cognitive and behavioural strategies to compensate for any deficits

#### **Our Services**

- Diagnostic studies, including MRI, CT scan, neurological function studies, bladder and bowel function tests
- Bowel and bladder management and training as well as pressure ulcer prevention and management provided by Rehabilitation Nurse
- Physiotherapy to increase muscle strength, improve balance, relieve pain, prevent spasticity and contracture, and restore mobility and function
- Occupational therapy to provide training in independent living skills, self-care, cognitive/ perceptual skills assessment and training, aid prescription, wheelchair/seating assessment and recommendation, home and workplace assessment, and vocational counselling



- Speech therapy for those having swallowing and/or communication problems
- Clinical psychology service to identify cognitive problems and to address emotional issues, including depression
- Urology service for bladder care, sexual function rehabilitation, family planning and reproduction care

### **State-of-the-Art Therapies**

- Advanced pharmacologic and therapeutic interventions to manage spasticity
- Body-Weight Supported Treadmill Training (BWSTT) to improve gait performance and mobility
- Functional Electrical Stimulation to reduce muscle atrophy and to improve muscle strength and cardiovascular function
- Constraint-Induced Movement Therapy to strengthen motor function
- Wheelchair and Seating Service to provide equipment recommendations based on patients' physical conditions, abilities and needs
- Videofluoroscopic swallowing studies to aid diagnosis and treat swallowing disorders with various modalities

 HKSH is the first and only private hospital in Hong Kong to install the Lokomat Robotic Gait-Training System to enhance motor and mobility function of patients with stroke



### **Pain Rehabilitation**

Acute pain is often a warning signal of injury or disease. Acute pain normally subsides following medical treatment and disease recovery. However, for a small proportion of patients, despite medical investigations and interventions, their pain becomes chronic without correctable cause, and is unresponsive to conventional treatments. Chronic pain is frequently associated with cervical and low back conditions, and disorders of the central or peripheral nervous system. Such uncontrolled and longstanding pain causes patients to withdraw into a downward spiral of anger, depression and despair. Pain patients' mobility strength, flexibility and endurance decrease, often to the point that even minor activities may aggravate their pain.

#### **Treatment Goals**

The Pain Rehabilitation Team helps individuals to accomplish the following goals:

- Regain physical strength and endurance necessary for full participation in life activities
- Reduce level of pain and, when possible, help patients become free of addicting drugs
- · Regain control of their pain and their life
- Reestablish normal relationships with family and friends
- · Overcome depression and anxiety
- · Replace a self-image of disability with one of wellness

## **Our Approach**

Our pain rehabilitation programme provides comprehensive specialised care to people experiencing chronic pain with an interdisciplinary team approach. Our Rehabilitation Specialist holds Subspecialty Certification in Pain Medicine, American Board of Physical Medicine and Rehabilitation. Our team works in a compassionate way to help people exceed their perceived limitations, eliminate harmful behaviours and replace them with healthy living. Following a comprehensive evaluation including review of the medical records from other institutions, detailed physical examination, special imaging studies and electrodiagnostic examination when necessary, an intensive interdisciplinary rehabilitation programme will be recommended. This may vary in intensity from inpatient care to a few hours of outpatient care per day.

Treatment options may include physical rehabilitation to improve body mechanics, muscle strength, flexibility and endurance. Non-addicting medications will be prescribed to control pain, insomnia and depression. Occupational therapy and work hardening will be provided to improve strength and endurance through the simulation of various work and leisure tasks. Some patients may benefit from clinical psychology evaluation, counselling and biofeedback training with the goal of pain control by reducing muscle tension and nervous system arousal. Referrals for special intervention procedures such as nerve blocks or electrical spinal cord stimulation may be needed for seleted patients.





# **Orthopaedic Rehabilitation**

Individuals who suffer from musculoskeletal injury, bone trauma, degenerative joint disease or has undergone joint replacement often have limited function and mobility, pain and other complications.

### **Our Approach**

Studies show that where an individual goes for treatment can make all the difference in his or her recovery. Research also indicates that early and intensive rehabilitation interventions can optimise functional gains. HKSH provides a comprehensive orthopaedic rehabilitation programme with medical, nursing and therapy care to meet the needs of each patient. Our goal-directed approach to orthopaedic and musculoskeletal rehabilitation provides tailor-made treatment programmes aimed at:

- Restoring physical function and enhancing the required skills for daily activities
- · Building muscle strength and improving endurance
- · Improving balance and regaining mobility
- · Optimising independence

# **State-of-the-Art Therapies**

- Advanced pharmacologic and therapeutic interventions to manage pain, muscle spasm and osteoporosis
- Body-Weight Supported Treadmill Training (BWSTT) to improve gait performance and mobility
- Functional Electrical Stimulation to reduce muscle atrophy and to improve muscle strength and cardiovascular function
- Hydrotherapy to strengthen motor function
- Occupational Therapy Service for assistive equipment and technologies based on patients' physical conditions, abilities and needs
- Orthotic Service provides custom-made orthoses and shoes

# **Spinal Cord Injury Rehabilitation**

Recovery from spinal cord injury involves great challenges and important choices. At HKSH, our multidisciplinary team of experts provides a comprehensive, integrated and intensive programme with medical, nursing and rehabilitation therapy to address the various needs of every patient, and to realise their life goals by optimising health, recovery and function. Our rehabilitation specialist is the first physician in Hong Kong who holds Subspecialty Certification in Spinal Cord Injury Medicine of the American Board of Physical Medicine and Rehabilitation.

#### **Our Services**

- Diagnostic studies, including MRI, CT scan, neurological function studies, bladder and bowel function test
- Bowel and bladder management and training as well as pressure ulcer prevention and management provided by Rehabilitation Nurse
- Physiotherapy to increase muscle strength, improve balance, relieve pain, prevent spasticity and contracture, and restore mobility and function
- Occupational therapy to provide training in independent living skills, self-care aid prescription, wheelchair/seating assessment and recommendation, home and workplace assessment, and vocational counselling



- Clinical psychology service to identify cognitive problems and to address emotional issues, including post-traumatic stress disorder and depression
- Speech therapy for those having swallowing and/or communication problems
- Urology service for bladder care, sexual function rehabilitation, family planning and reproduction care

### **State-of-the-Art Therapies**

- Body-Weight Supported Treadmill Training (BWSTT) to improve gait performance
- Functional Electrical Stimulation to reduce muscle atrophy and to improve muscle strength and cardiovascular function
- Wheelchair and Seating Service to provide equipment recommendations based on patients' physical conditions, abilities and needs
- Hydrotherapy



 Lokomat Robotic Gait-Training System to help build new neural pathways and enhance motor and mobility function of patients with spinal cord injury

# **Amputation Rehabilitation**

People with amputation often face a challenging period of physical recovery, and need to deal with a wide range of emotional and social issues. Our rehabilitation team understands this and offers comprehensive and compassionate care, addressing both physical and emotional issues that come with an amputation. Attending to their individual needs, we provide assistance and guidance through training, education and state-of-the-art technologies to help patients to overcome the amputation process and to lead an independent and rewarding life.

#### **Our Services**

- Provide information on amputation and prosthesis options and answer patient's enquiries
- Ensure proper wound care and healing after surgery without complication
- · Ensure surgical and phantom pain are well controlled
- Provide dietitian consultation to ensure proper nutrition for wound healing, diabetic control, other medical and metabolic conditions
- Coordinate physiotherapy and occupational therapy to improve patients' strength, flexibility, coordination, endurance and proficiency in daily life
- Provide clinical psychology consultation for emotional, social and behavioural issues
- Offer professional fitting service and custom-made prostheses to meet individual lifestyle needs



- Provide training and education on the use and care of prostheses
- · Offer follow-up care as needed

Our Prosthetics & Orthotics Services team designs and fabricates orthotic and prosthetic devices with state-of-the-art technologies and high-end components to meet each patient's personal needs.