

General and Special Orthopedic Procedures II

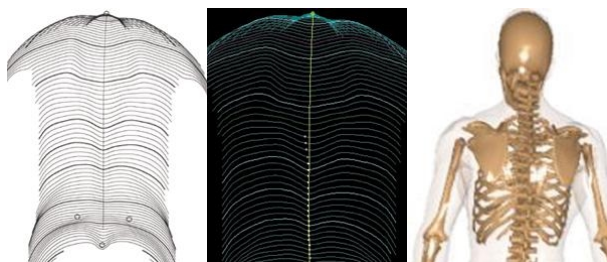
3-D Spinal Column Measurement

3-D spinal column measurement is a new diagnostic procedure that makes long-term tracking of spinal column anomalies such as scoliosis possible without continuous exposure to x-rays.

This procedure, a combination of video and information processing technologies, can measure to the millimeter the position and form of the spinal column. The skeleton is measured with a beam of light, taking only 0.04 seconds and involving no radiation. The results often make x-ray diagnosis unnecessary.

The system combines a computer, a scale, a video camera and a projector. The projector uses a beam of light to trace a pattern of parallel lines on the patient's back, revealing any anomalies that might be present. The scale registers the distribution of body weight on each separate leg. The physician can then determine how to best even-out any differences, and corrections are tried out as the patient stands on an adjustable platform. The platform makes a precise analysis of deviations and anomalies possible.

The camera takes a 3-D picture which is fed into the computer and analyzed. The physician can compare older and more recent results on the spot. The procedure can also be used to objectively determine the success of other procedures such as chiropractic therapy.



Indications

- spinal column anomalies
- chronic back pain
- headaches/tension headaches

recurring muscle tightness of the back and neck **Value**

Since it uses only light beams to trace the contours of the back the procedure has no side-effects. Children with spinal column anomalies can be followed long-term without exposure to frequent x-rays. The procedure's precision and gentleness make it an appropriate resource when planning individual back pain therapies.

Physical Therapy

We work with you in developing your own health and prevention programs. Our staff offers various therapy options and modern physical therapy facilities.

Whether following operations, injuries or illnesses of the musculoskeletal system, or whether the problem is of a neurological nature, our qualified staff can provide the right treatment for you.

You can also do something good for your health and well-being by taking advantage of our experience in preventative medicine.

A holistic therapy approach combined with modern facilities and a pleasant atmosphere is waiting for you.



Physical Therapy

- manual therapy (Kaltenborn/Evjenth Method)
- functional movement training (Klein-Vogelbach Method)
- reflective breathing therapy (Schmitt/Brüne Method)
- sports rehabilitation
- functional training
- manual lymphatic drainage
- walking training

Electrotherapy

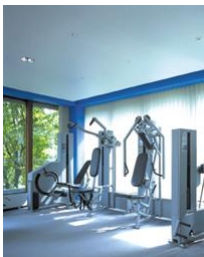
- analgesic and anti-inflammatory electrical currents
- stimulatory treatment of weakened muscles
- threshold current treatment of weakened muscles
- ultrasound
- ionotherapy
- high frequency therapy

Miscellaneous

- hot pads
- volcanic mud
- ice applications
- hydrojet and massage

MedX-Therapy

MedX-Therapy stabilizes and strengthens the entire spinal column by training specific movements on specialized exercise machines. The exercise machines in the MedX-Center utilize the latest in exercise technology to reduce unnecessary friction and strain on joints and muscles.



MedX exercise machines are precisely adjusted to each individual patient during the first therapy session. The training begins after determining the strength of the back muscles, followed by one-on-one consultation for the length of training. The back muscles are gradually strengthened, resulting in long-term success of the therapy.

Indications

- rehabilitation following spinal column procedures
- prevention of spinal column problems caused by existing spinal anomalies
- in combination with conservative treatment of spinal column instability, vertebral joint or disk fixation
- in combination with conservative treatment of osteoporosis
- appropriate for cervical, thoracic and lumbar spine

Value

MedX training cannot replace conventional physical therapy. MedX training can, however, result in lasting strengthening of specific muscle groups of the spinal column. The precision of MedX training makes it much more effective than conventional strength training.

Pulsating Signal Therapy PST

PST is a non-invasive, side-effect-free procedure which stimulates the body's connective tissues to synthesize functional and structural substances.

PST produces magnetic fields that stimulate chondrocytes (cartilage-producing cells) and fibroblasts (connective tissue-producing cells) into regenerating their respective tissues.

Tissue cultures of chondrocytes stimulated by PST have shown a markedly higher production of cartilage.

PST treatment can lead to normalization in tissues like hyalin cartilage, ligaments, tendons and joint capsules. Clinical studies have shown that PST lead to a significant reduction of pain.

PST therapy can reverse the changes in joint structure caused by inflammation and help to stabilize the joint's synovial fluid. Better joint movement means a further improvement of overall joint function.

Indications for the Lower Extremities

- Arthrosis (with intact joint cartilage)
- injured menisci (which do not mechanically block movement of joint)
- damage to knee cartilage and tendons as a result of overexertion

Indications for the Upper Extremities

- shoulder and elbow joint pain (for example tennis elbow)

Indications for the Spinal Column

- degenerative change of the spinal column or intervertebral disks

PST has also been proven useful in the treatment of chronic polyarthritis.