## Exercise therapy Back ache

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- 1. Lumbago
- 2. Chronic lumbalgia
- 3. Sciatica

Disc- degeneration, protrusion, hernia
Discogenic pain- radicular syndrom –bellow knee
psedoradicular syndrom- up the thigh

Facet joints
Spinal stenosis
Spondylolistesis
Ancylosing spondylitis
Osteoporosis
Infections
Tumors

Developement correct movements

Rebuild fixed stereotypes in various postural situations

Cortical components of the movement system

Plasticity of CNS

Relaxation is necessary

Body image

Deep sensation

To form truly economical movements stereotypes

Breathing pattern

Stabilisation of muscle function Acute x chronic – different approach

Acute stage- medicine, rest

Chronic stage

specific exercise, individual intensity change the posture ergonomic meassurement supportive bracing strengthenig of trunk muscles: Th and L spine, thorax, pelvis muscles

Spinal stabilisation function:

Not only flexion and extension. Not according origin and insertions

Upright alignment

To reinforce segments with other muscles

Coordination during muscle activation

Spinal extensors- deep extensor first !! then superficial extensors

Synergy between diaphragma, abdominal muscles and pelvic floor muscles- play a crucial role

Pelvic tilt is important Intraabdominal pressure is increased

The patient should not be a pasive recipient of the therapy but active participant of the therapy

## Other modalities

Mobilisation techniques
Influencing of trigger points
McKenzie therapy

CT guided facet denervation

CT guided periradicular therapy (morphium, marcain, local corticoids)

**Analgetics** 

**NSAID** 

Anticonvulsion drugs- muscle relaxant

Antidepresant drugs

Drugs for peripheral nerve regeneration

Surgery