# Exercise therapy

Rheumatoid disesases

# Rheumatoid arthritis

Individual  approach to accomodate to current condition

Acute stage: cryotherapy
liquid nitrogen- localy, whole body

In remisions: parafin wraps
whirpool, aquatic therapy
ultrasound, laser

# Rheumatoid artritis

Physical rest
Positioning in a sling
Thermoplastic splints
Functional splinting
Passive movements
Traction, relieving tractions
Cervical soft tissue relieving tractions
Relaxation
Joint mobilisation
Isometric contractions

# Rheumatoid artritis

Gradualy more active movements
- to strengthen atrophic muscles

Active exercise: muscle tone, ROM, muscle strength

Gait training (crutches)

Aerobic fitness training

Occupational therapy

Balneology

# Ancylosing spondylitis

Daily exercice program- daily routine at least 30 minutes/day

Early education about the disease

Cooperation of the patient

Exercise therapy is fundamental

Active movements every day

The aim- to slow down spinal ancylosing process
to prevent kyphotic deformity

# Ancylosing  spondylitis

Spinal and thoracic mobility

Muscle balance and ROM

Postural corrections

Maximum breathing capacity

Patient´s overal fitness

# Ancylosing spondylitis

**Stage of high level activity:**

Positioning

Passive exercise

Breathing exercise

Soft tissue techniques

Active exercise

# Ancylosing spondylitis

**Stage of moderate or low level activity:**

Postural reeducation

Gentle mobilisation of sacroiliacal joints

Spine and rib mobilisations

Release of shortened muscles

Chest breathing

Deep spine exercise

General relaxation

# Ancylosing spondylitis

**Stage of moderate or low level activity:**

Maintenance of optimal mobility

Stretching, exercise into backward bending

Somatognostic training

Swing movements

Using of balls, wands, resistive bands,wall bars

Group exercise

Physical therapy:
Magnetic field application, ultrasound, electrotherapy

Balneotherapy

# Exercise therapy

Overloading conditions

# Principles of rehabilitation

Acute stage – cryotherapy

Chronic stage- to address oedema
muscle imbalance
limited ROM
physical therapy - hydrotherapy, underwater masage
ultrasound - antiinflammatory effect
pulsed magnetic field – effect on osteoporosis

# Overloading

Acute stage- rest, orthesis
local and systemic NSAID
local corticosteroids

Chronic stage- treatment of oedema and inflammation
physical therapy
soft tissue techniques
joint mobilisation
electrotherapy- DD, TENS, laser…

# Chronic stage of overloading

Muscle relaxation
To correct muscle contractions in neutral joint alignment
PIR, antigravity  relaxation, Vojta ´s method locomotion
Closed kinetic chain exercise
Ultrasound  and combined electrotherapy

To improve poor posture
To stop pathological movement stereotypes
Spinal mobilisation
Muscle activation
Lumbopelvic stabilisation- to get correct pattern
To modify pathological movement  pattern
Training in neutral joint position

# Chronic stage

Releas local spasms-  trigger points
- deep muscle massage, PIR
- ultrasound, shock  wave therapy, contrast baths

Excentric exercise

To affects surrounding muscles (  e.g. elbow- scapular muscles)

Ergonomics to be modified

To modify training methods

To strengthen the muscles