

Rheumatoid diseases

Exercise therapy

Systemic autoimmune diseases

Rheumatoid arthritis

- Juvenile arthritis
- Systemic lupus erythematoses
- Sclerodermia
- Sjogren syndrom

- Polymyalgia rheumatica

Spondylarthritis

- Ankylosing spondylitis
- Psoriatic arthritis

Crystal arthritis

- Gout
- Chondrocalcinosis (calcium pyrophosphates)

Arthritis in connection with infection

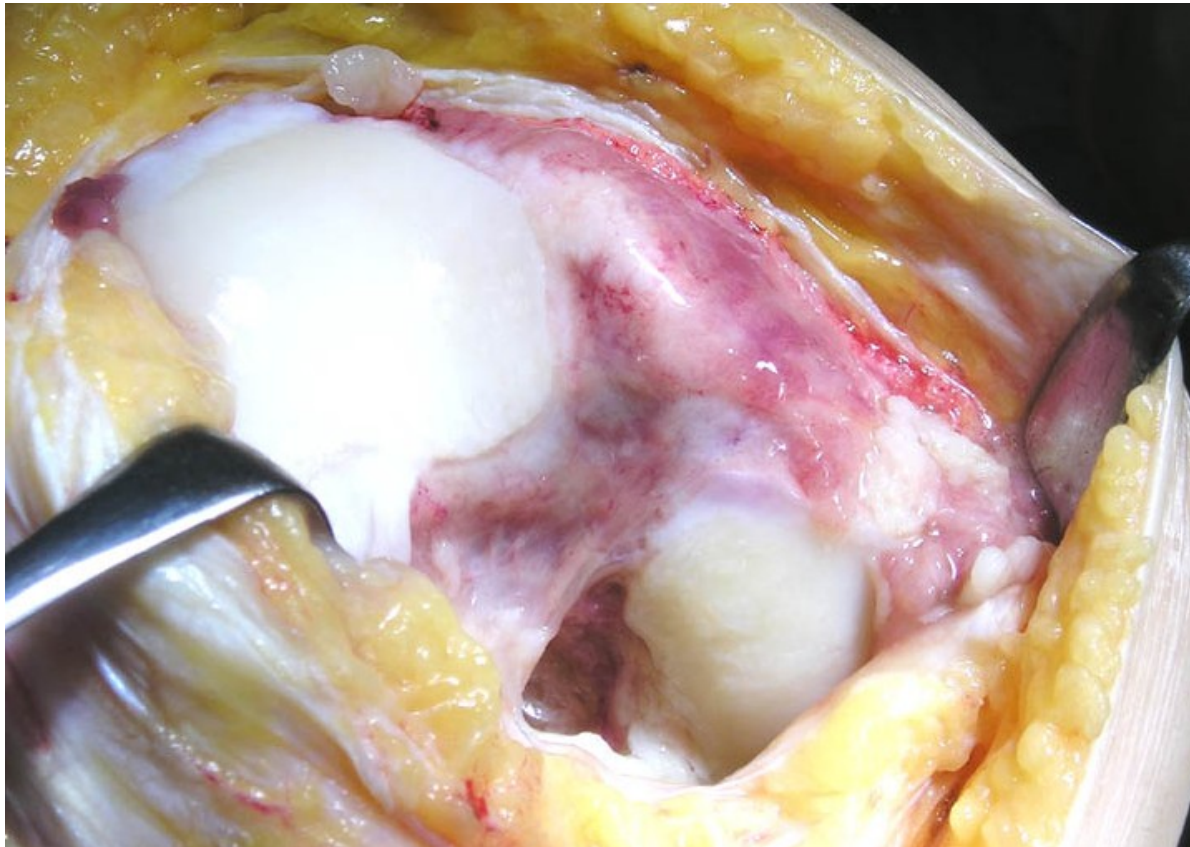
- Lyme's boreliosis
- Septic arthritis

Rheumatoid arthritis

Chronic autoimmune disease

- Chronic polyarthritis
- Bone erosions
- Destruction of joints
- Disability- low physical activity
- Extraarticular symptoms
- Comorbidities, higher mortality
- 1% of population
- Female 4 times more affected
- Onset in 4. and 5. decade

Basic feature: hypervascularisation tissue – pannus formation
in a joint
leading to damage of hyaline cartilage, decalcination
and bone erosions



Hand

Oedema

Rheumatoid nodes

Synovitis, synovial hyperplasia

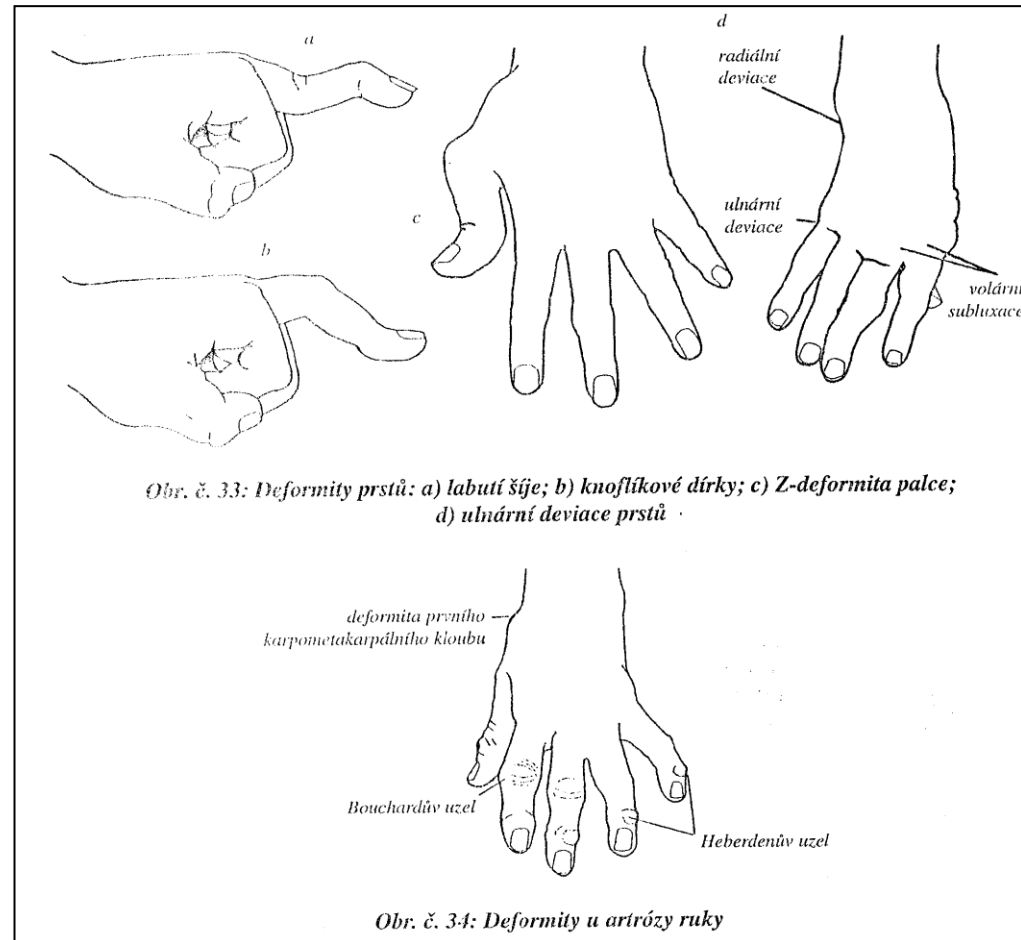
Ulnar deviations of fingers

Z deformity of the thumb

Swan neck deformity

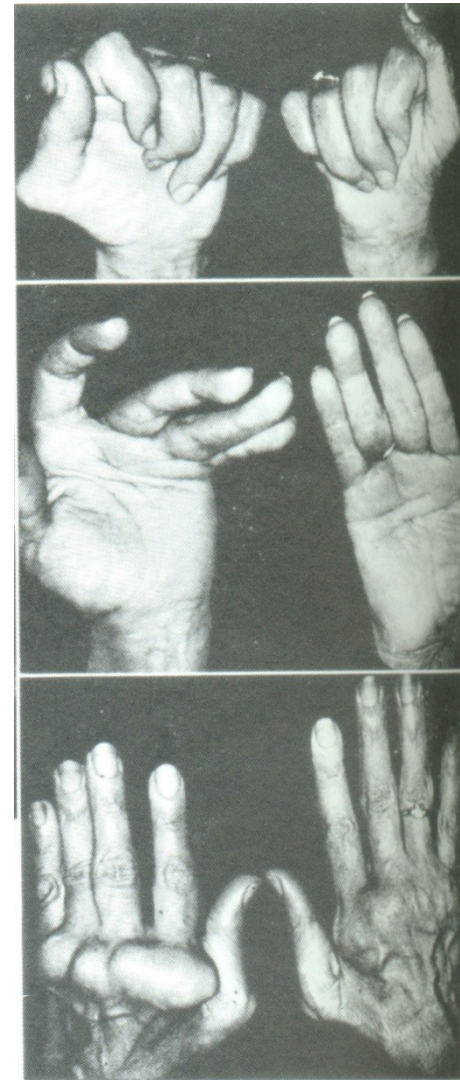
Button hole deformity

Volar subluxation of the wrist joint



Deformities in the hand

Swan neck deformity
Z deformity of the thumb
Ulnar deviation of fingers
Synovitis of MCPPh, DIP joints
Digiti telescopici
Button hole deformity

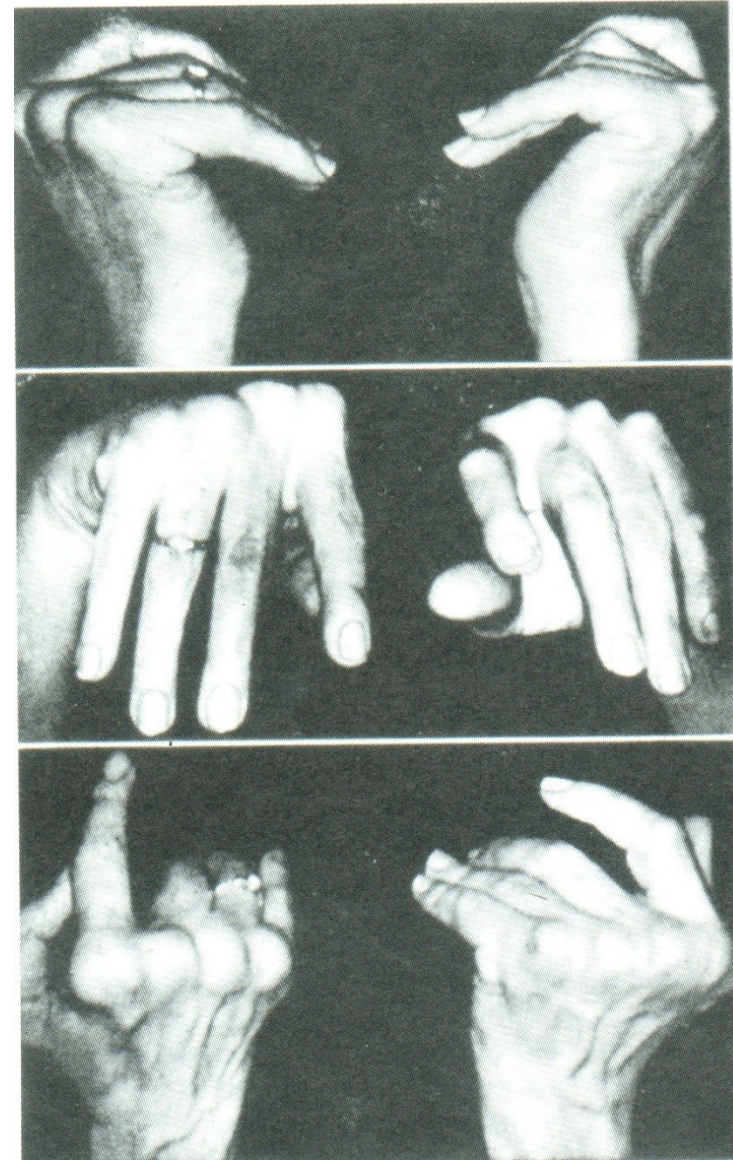


Hand in RA

Radial deviation of the wrist joint

Volar subluxation of the wrist

Dorsal prominence of the head of ulna



X ray



X ray



X ray



X ray



Carpal tunnel syndrom

Compression neuropathy of median nerve

Pain

Hypotrophy of thenar muscles

Limited muscle power

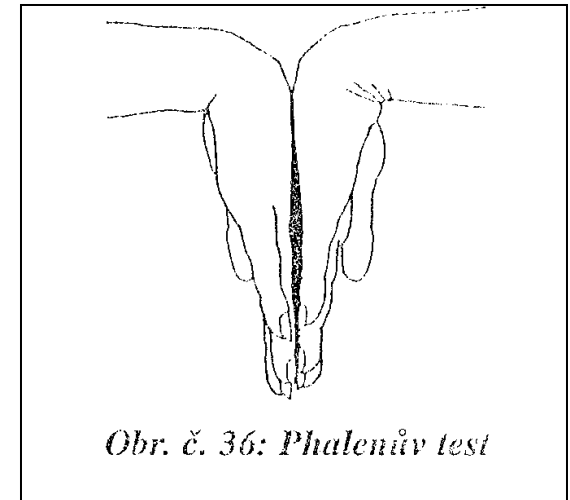
Limited pinch and grasp

Paresthesia, tingling and itching

Tenderness

Tinnel sign

Phalen test



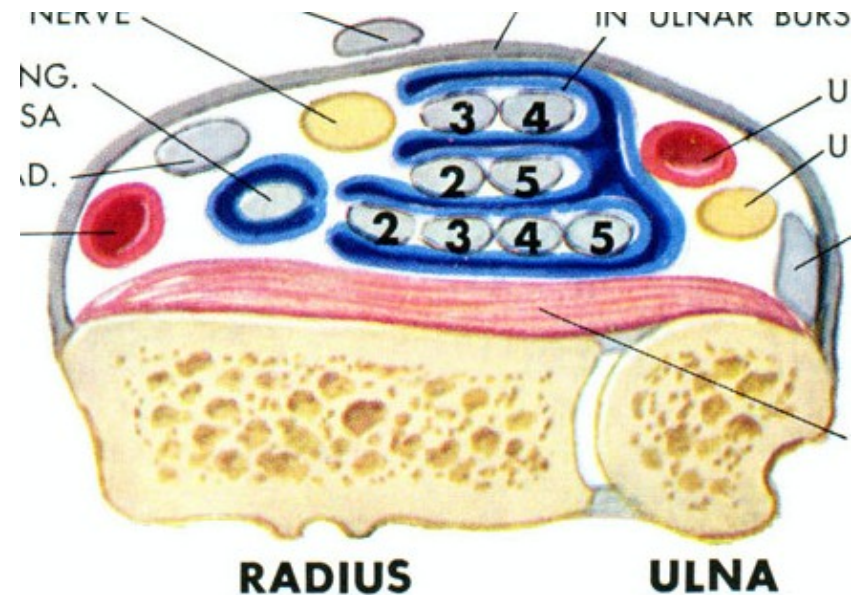
Guyon canal syndrome

Compression of ulnar nerve near os pisiforme

Symptoms:

- Paresthesia in ulnar side
- Hypotrophy of hypothenar muscles
- Tenderness in region of os pisiforme

Therapy: local corticoid, NSA
surgery



Therapy of rheumatoid arthritis

Complex

- pharmacological: NSAID, glukocorticoids, DMARDs
- Physical therapy : to maintain ROM
- social program – job, pension
- surgery : to maintain biological joint replacement

Management

The aim: to achieve long lasting remission or
at least low level of activity of the disease

NSAID- Cox 1 a Cox 2

DMARD- disease modifying antirheumatic drugs

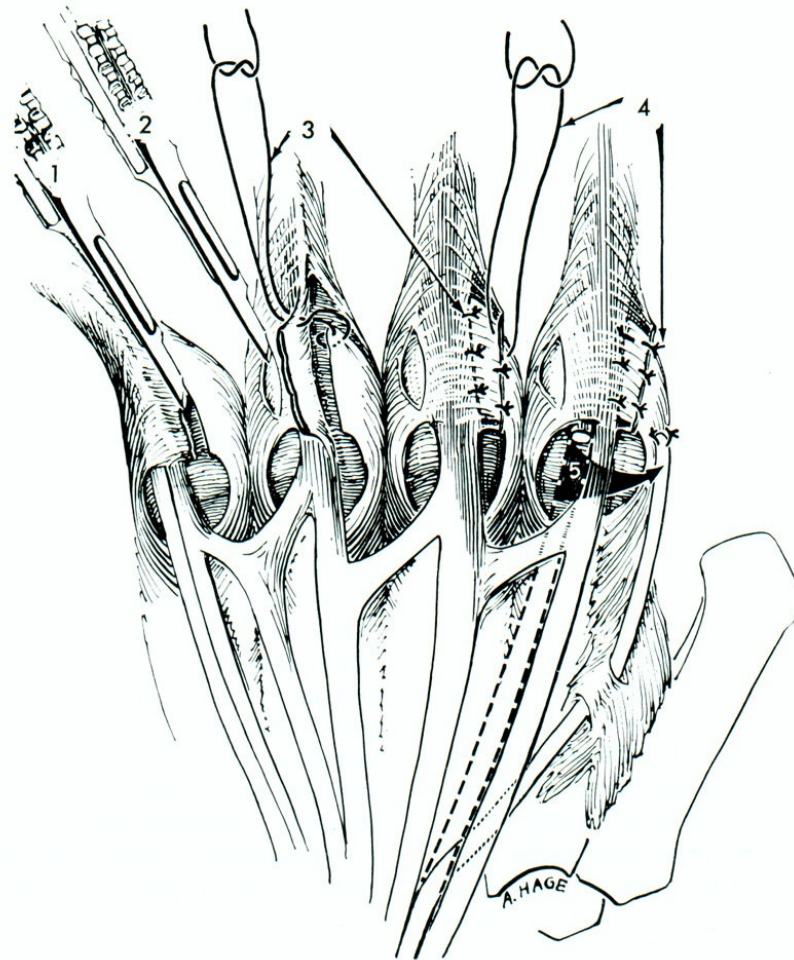
- syntetic: metotrexat, leflunomid, sulfasalazin, hydroxychlorochin
- biological: infliximab, etanercept, adalimumab, golimumab
abatacept, tocilizumab

Glukocorticoids: hydrocortizon, prednison, dexametason, betametazon,
methylprednisolon, triamcinolon

Surgery

- Synovectomy
- Suture of tendons
- Arthrodesis- fusion
- Atlantoaxial fusion
- Osteotomy
- Joint replacement

Synovectomy of MP joints and capsular plasty

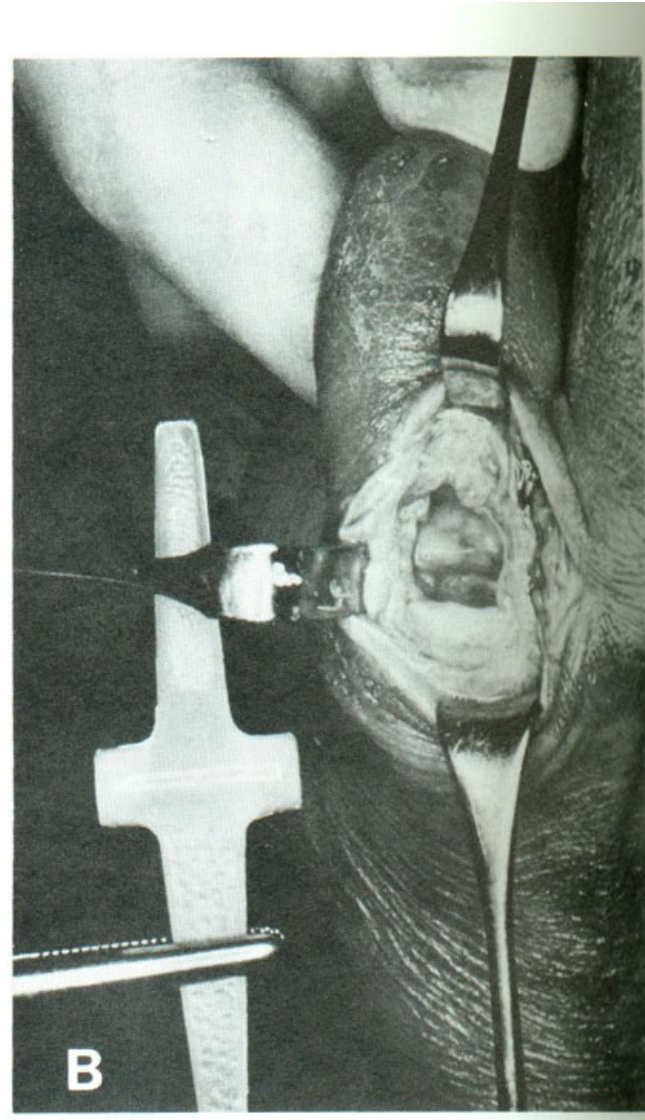


Silastik - replacement

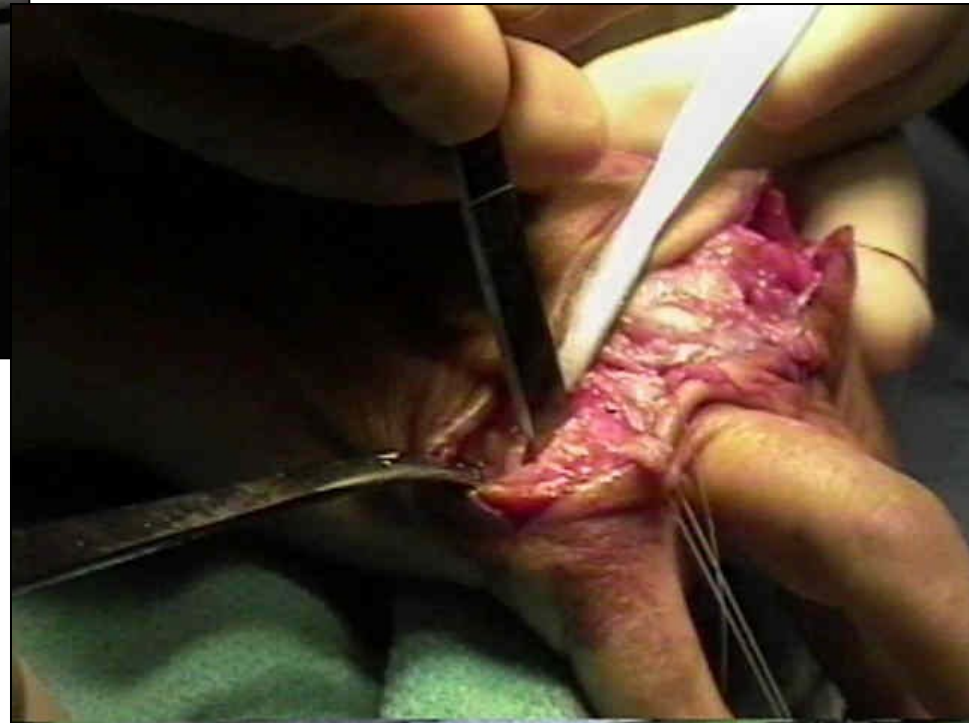




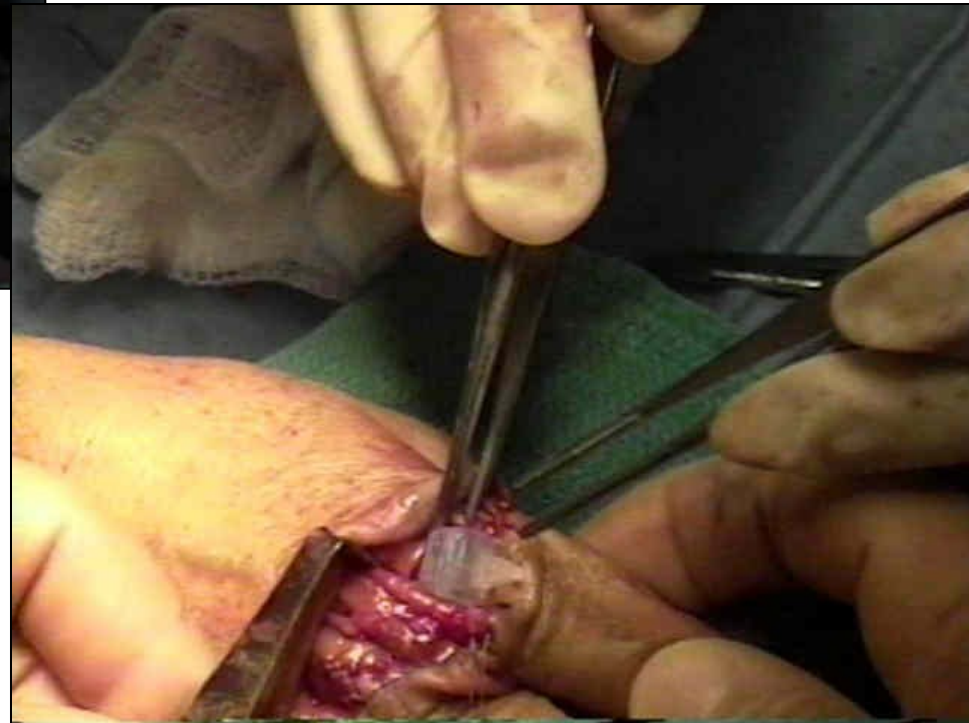
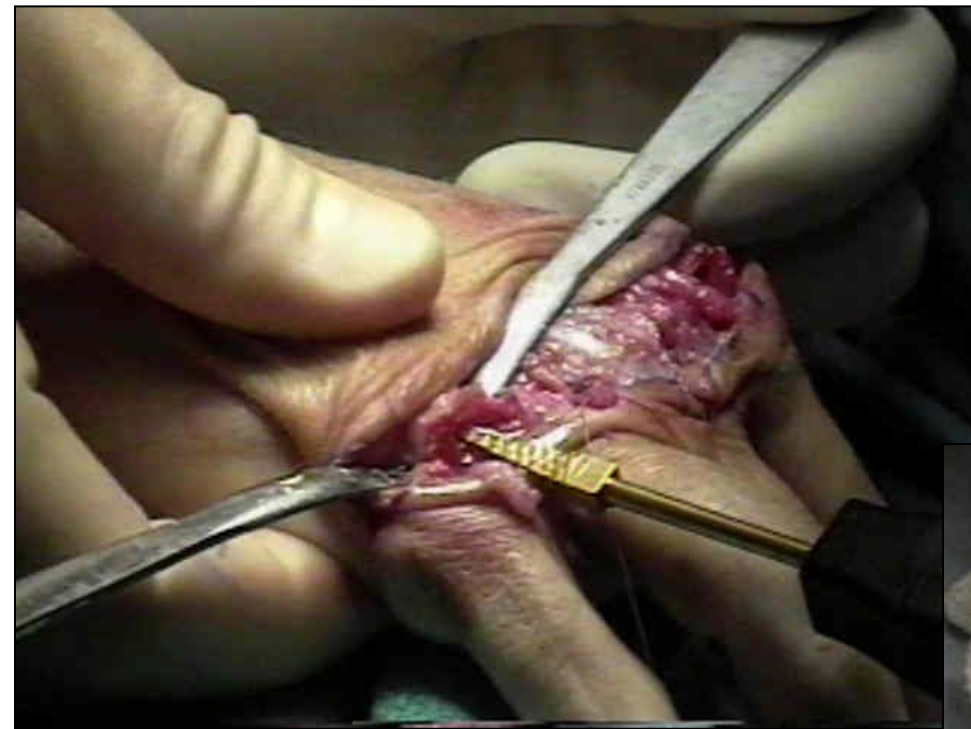
**FIXATION
BY
ENCAPSULATION**



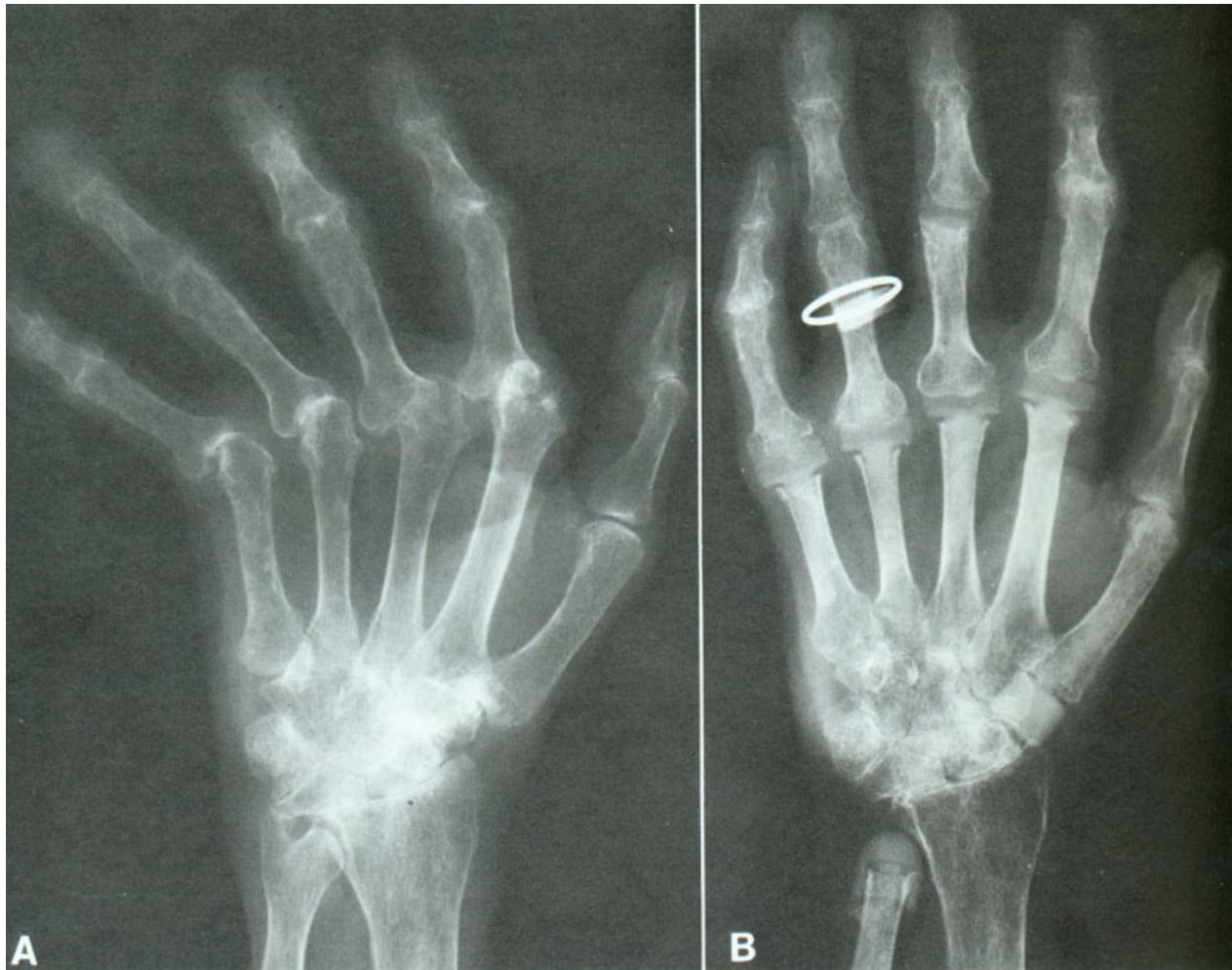
Silastik - replacement



Silastik – replacement



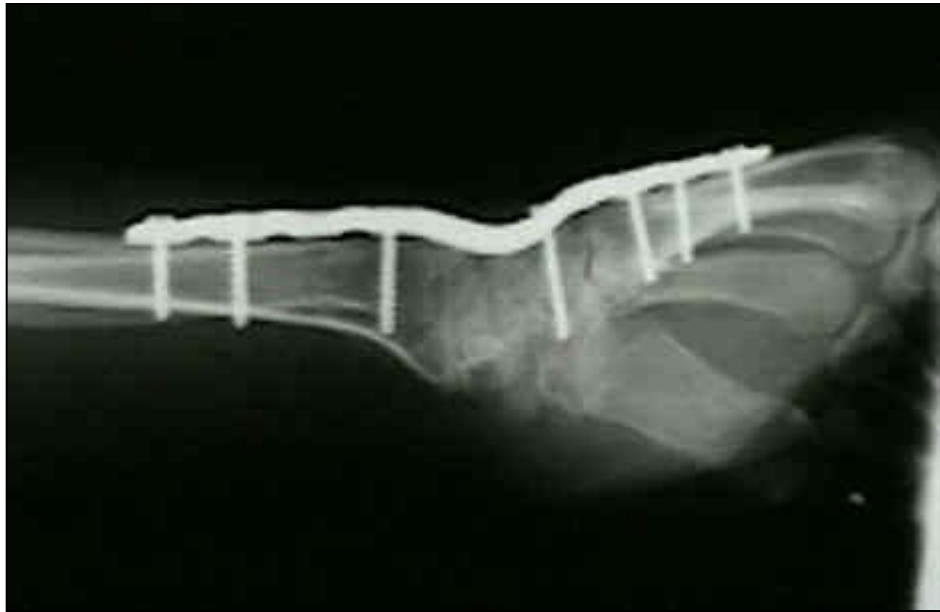
Silastic joints



Preop

postop.

Wrist fusion



10-15 st. dorsiflexion
5-10 st. ulnar deviation



Rheumatoid arthritis

Synovialitis:

Elbow

Shoulder

IV joints C1-C2- axial instability

Hips

Knee joints

Ankle joints

Small joints of the foot

Tenosynovialitis of tendons

Th.- synovectomy

Psoriatic arthritis

In 20% of psoriatic patients

Seronegative arthritis associated with psoriasis

Peripheral joints (arthritis DIP, telescoping fingers, oligoarthritis
hips, knee, shoulder)

Axial skeleton- spondylarthritis (sacroileitis, spondylitis,
severe destructions)

Entesitis (Achillis tendon, plantar aponeurosis, pelvis)

Dactylitis (Wurstfinger)

Management of psoriatic arthritis

NSAID

Glukocorticoids

DMARDs – syntetic (metotrexat, sulfasalazin, leflunomid,
cyklosporin)
biologic- infliximab, etanercept, adalimumab aj.

Surgery- replacement, synovectomy, fusion

Ankylosing spondylitis Bechtěrev disease

Chronic affection involving SI joints, vertebral column,
less peripheral joints

Sacroileitis, entesitis

Back pain

Other locations: uveitis, skin, lung, eye

HLA B27 antigen positive increases the risk of disease 50 times more

0,5 % of population

Female: male 3:1

Symptoms: back pain, gluteal region, entesitis of ligaments and tendons
rhisomelic form (hips, shoulders)
peripheral arthritis- knee, dactylitis

Ancyllosing spondylitis

Onset in SI joints

Progress into lumbar, thoracic, cervical spine

Onset- 20-40 years

Back pain, heel pain, effusion in knee joints.

Progressive limitation of movements in the spine

Increased thoracic kyphosis, diaphragm breathing

Ancylosis of intervertebral joints

Ancylosis of costovertebral joints

Ossification of disc, ligaments



Obr. 21

Clinical examination

Restricted movements in the spine

Schober, Thomayer, bending

Expirium- inspirium rib cage circumference
less than 4 cm

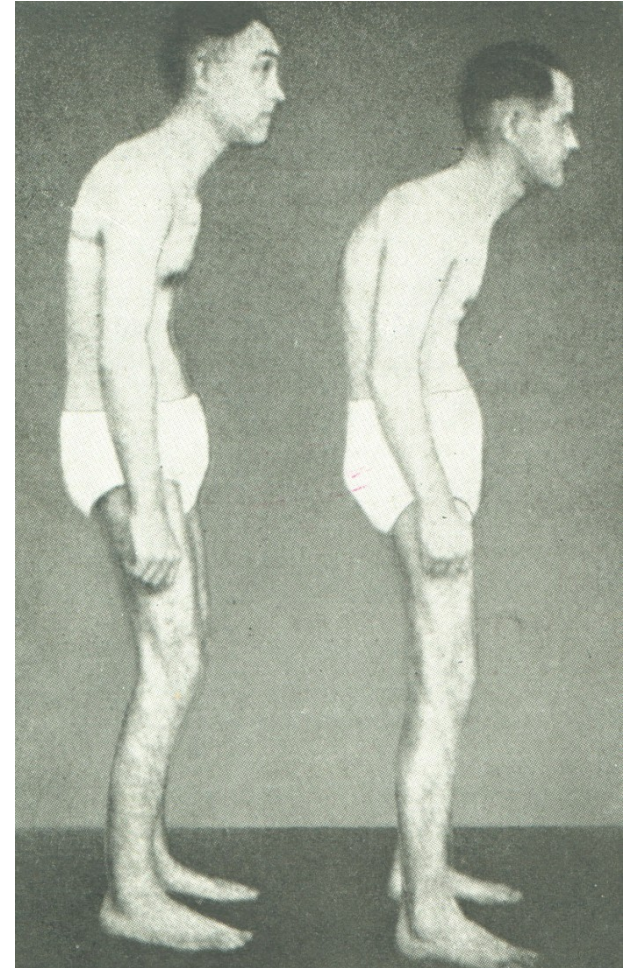
Limited rotation in cervical spine

Hyperkyphosis

Fleche- distance Th spine- wall

Entesitis

Daktylitis



X ray

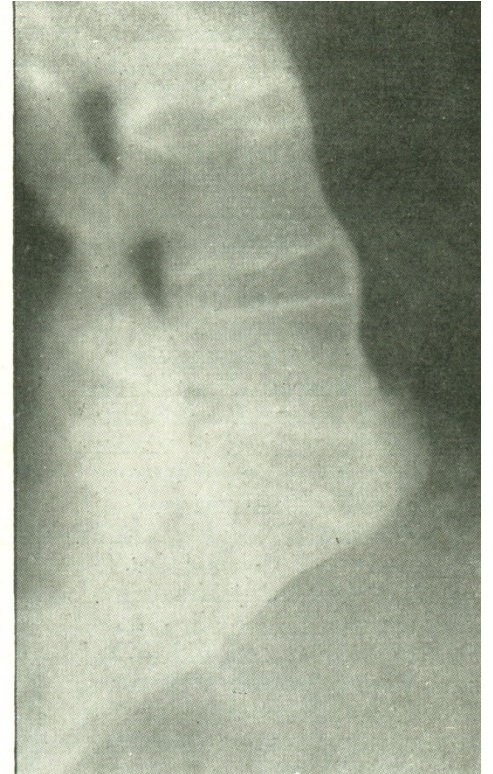
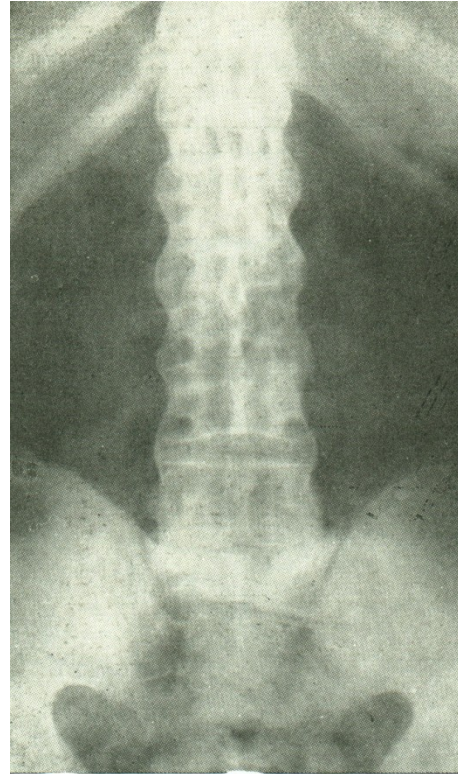
Sacroilitis

Rectangular shape of vertebrae

Syndesmophytes

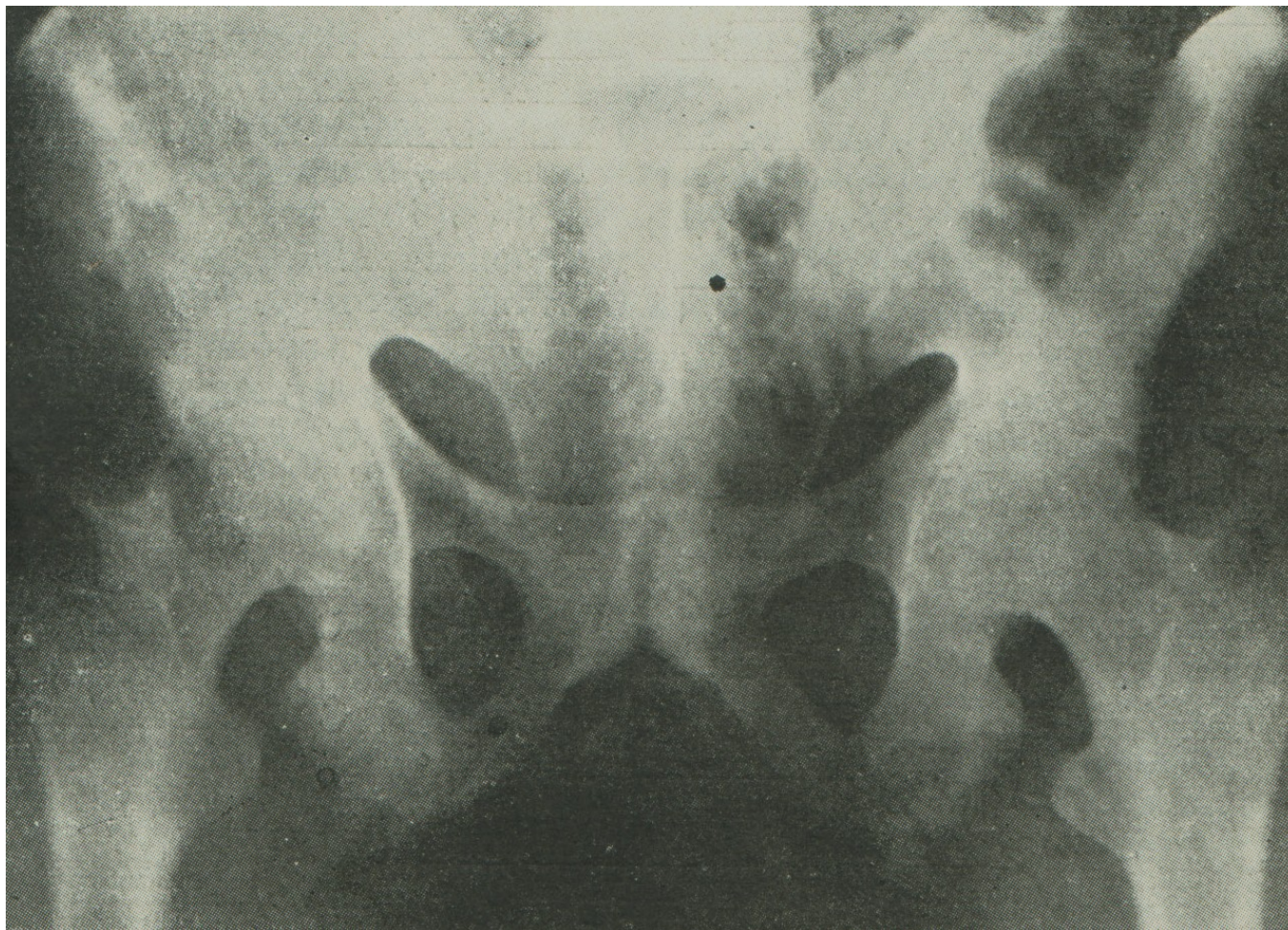
Fusion of apophyseal joints

Bamboo rod



Bamboo rod

Rhisomelic form



Obr. 2

Management

NSAID

Glucocorticoids

DMARDs syntetic
biologic

Physical therapy

Surgery: replacement
surgery in spine