

19

General Orthopaedics

Key Points



19.1 CONGENITAL AND DEVELOPMENTAL PROBLEMS

- There are four major hip disorders in children; each occurs within a specific age range and may cause severe hip deformity if not treated early
- They include:
 - Developmental dysplasia of the hip
 - Septic arthritis
 - Avascular necrosis (Legg- Calve-Perthe's Disease)
 - Slipped capital femoral epiphysis
- Diagnosis is made by clinical examination. X-rays are useful for follow-up care, but are not essential.



19.1 CONGENITAL AND DEVELOPMENTAL PROBLEMS

Hip disorders in Children

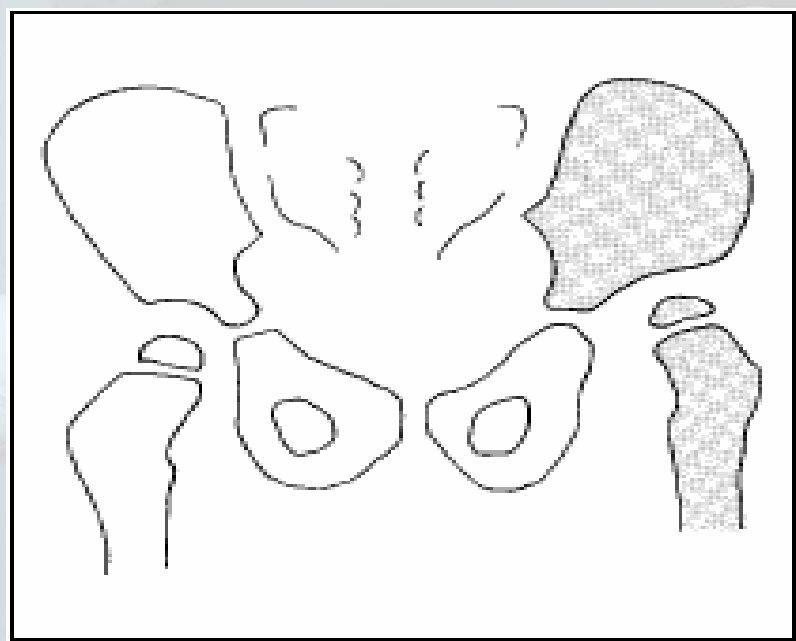


Figure 19.1

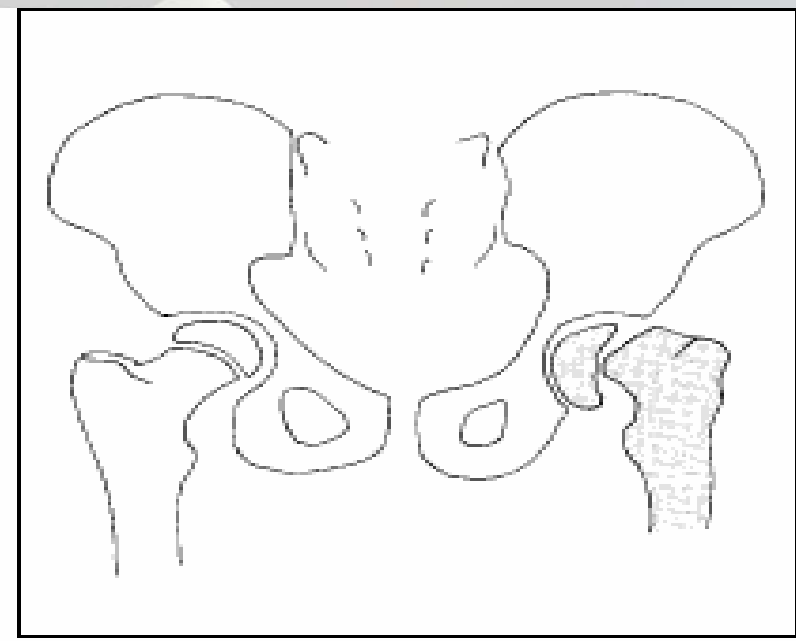


Figure 19.2

congenital dislocation of the hip

Slipping of the femoral epiphysis



19.1 CONGENITAL AND DEVELOPMENTAL PROBLEMS

TALPES EQUINOVARUS (CLUB FOOT)

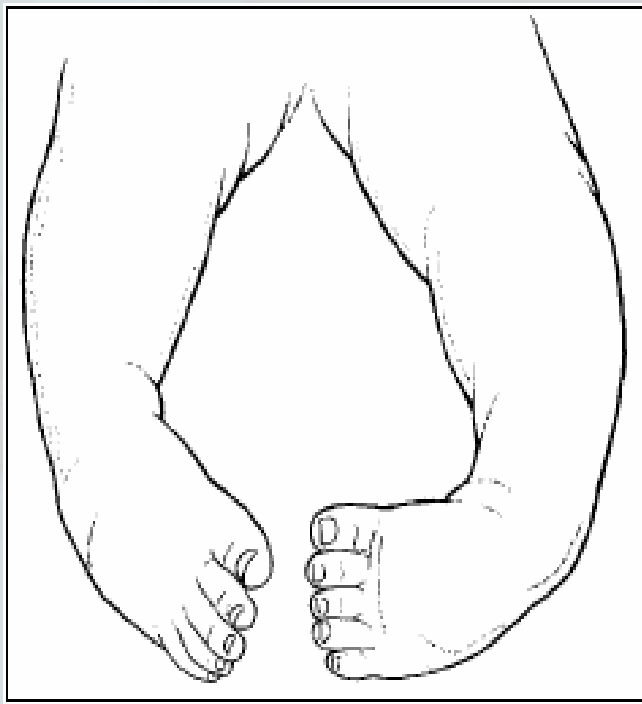


Figure 19.3

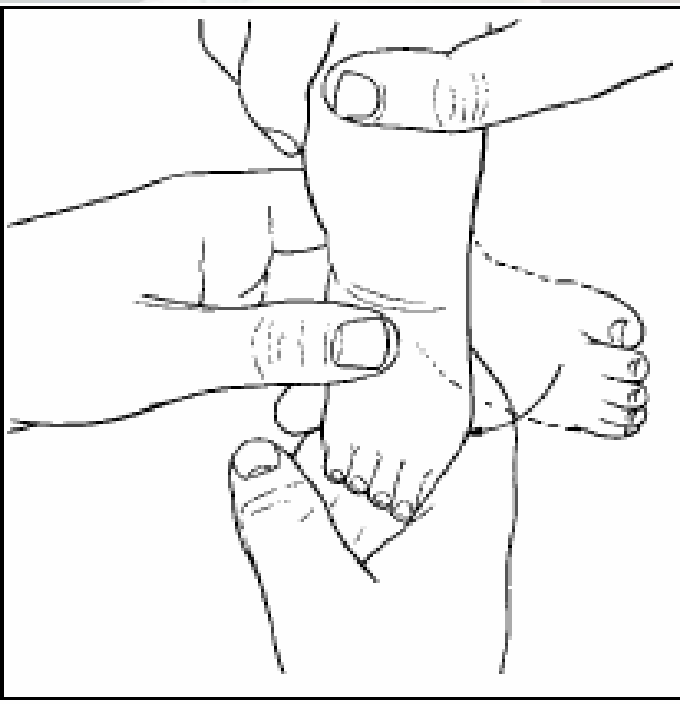


Figure 19.4

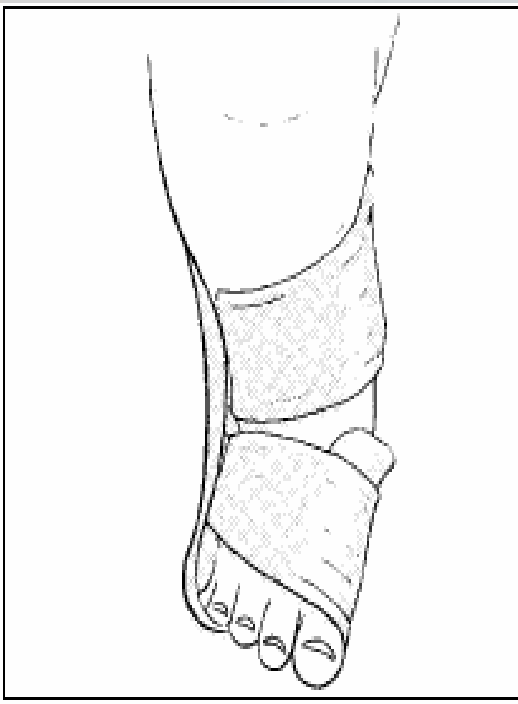


Figure 19.5

19.1 CONGENITAL AND DEVELOPMENTAL PROBLEMS

- The heel and forefoot are inverted, with the ankle in plantar flexion; the deformity is not correctable with manipulation
- Begin treatment as early as possible with manipulation and repetitive casts
- Patients presenting after 6–12 months of age will need surgical correction.



19.2 BONE TUMORS

- Tumours in bone are either primary (originating in the bone) or metastatic (originating elsewhere and spreading to bone)
- Differentiating between benign and malignant tumours requires X-rays and, usually, biopsy
- Treatment of malignant bone tumours requires special facilities, including chemotherapy, radiation therapy and surgery.



19.3 INFECTIONS

Septic arthritis

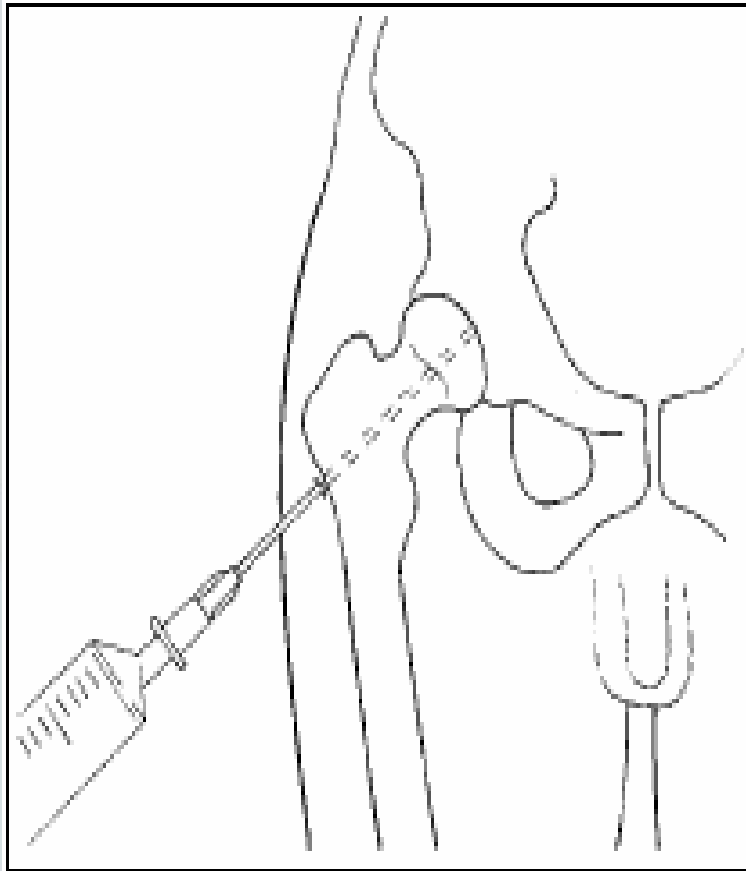


Figure 19.6

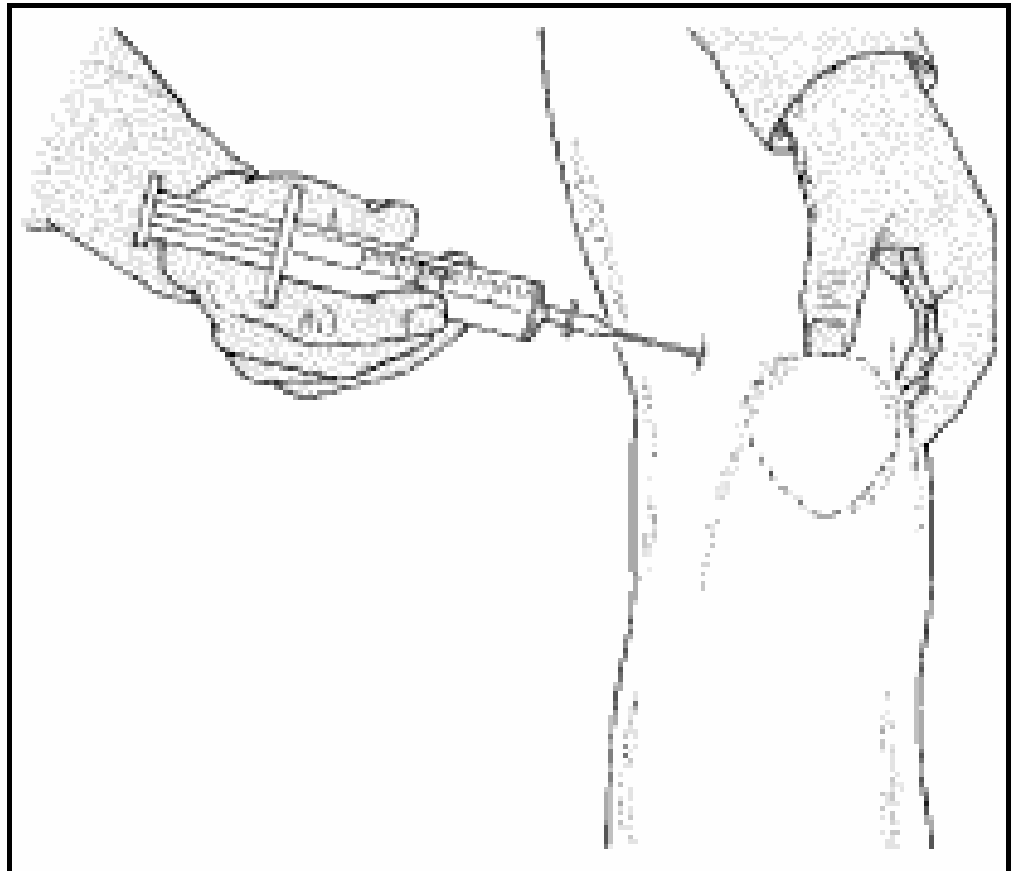


Figure 19.7

19.3 INFECTIONS

Septic Arthritis

- **Joint infections arise from infections elsewhere in the body or from a direct wound into the joint**
- **Suspect infection when there is swelling, pain and loss of joint motion**
- **Confirm diagnosis by aspiration of purulent fluid from the joint**
- **Treat with needle or open joint drainage and antibiotics.**



19.3 INFECTIONS

Pyogenic osteomyelitis

- Bone infections come from haematogenous spread from a distant site, from penetrating wounds and after surgery
- Acute infections are treated with antibiotics; once an abscess forms, surgical drainage is necessary
- Chronic osteomyelitis is the most common type; a draining sinus and sequestrum (dead bone fragment) are usually present
- Removing the sequestrum is necessary to control the infection, but it should not be performed until the involucrum (new reactive bone) has fully formed.



19.3 INFECTIONS

Pyogenic osteomyelitis

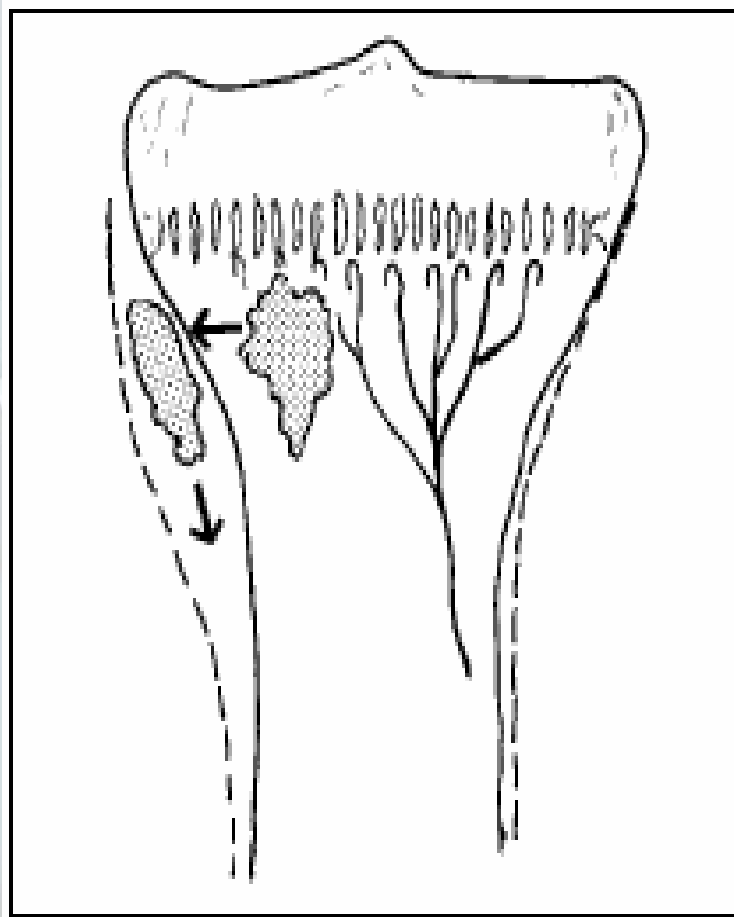


Figure 19.8

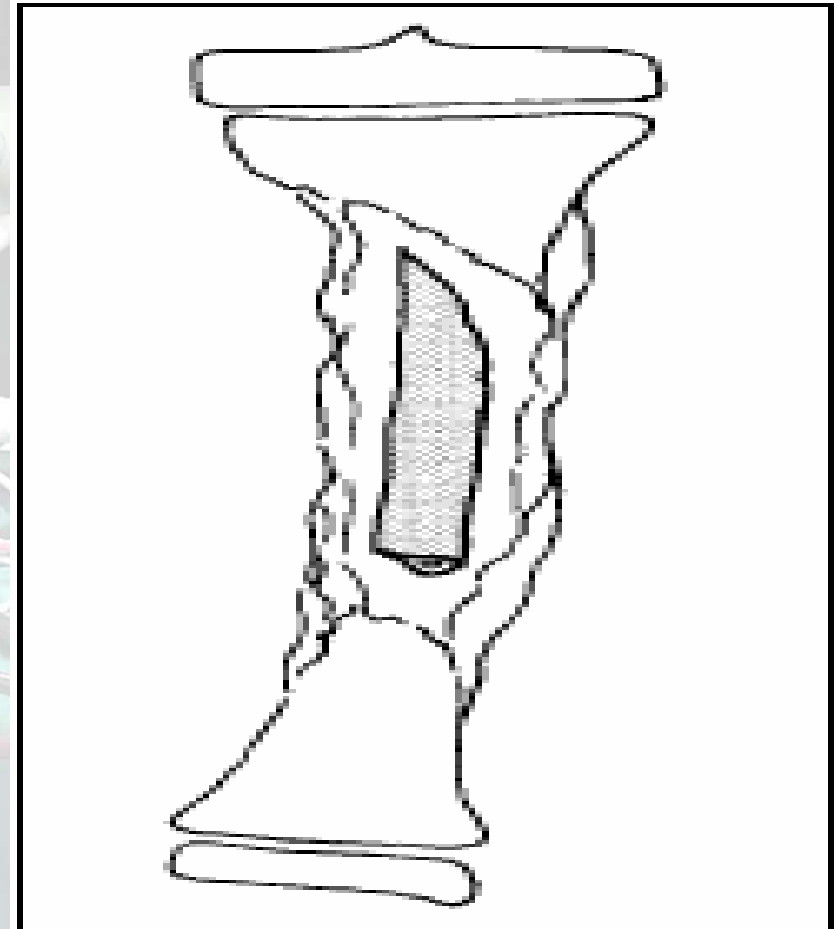


Figure 19.9

19.4 DEGENERATIVE CONDITIONS

- Arthritis is an abnormality of joints arising from overuse or injury (degenerative arthritis) or inflammation (rheumatoid arthritis)
- Diagnosis is made from the history, physical examination and distinctive X-ray changes
- Non-surgical treatment consists of anti-inflammatory medication, injections, muscle strengthening and rest.



19.4 DEGENERATIVE CONDITIONS

- Bursitis and tendinitis result from an inflammatory response to overuse
- Common locations for bursitis are the shoulder, elbow, hip and knee

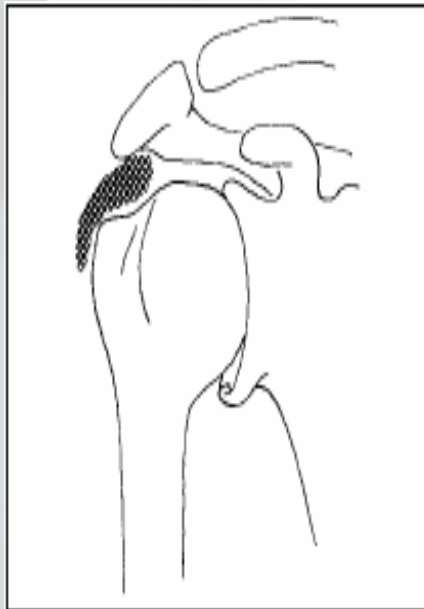


Figure 19.10

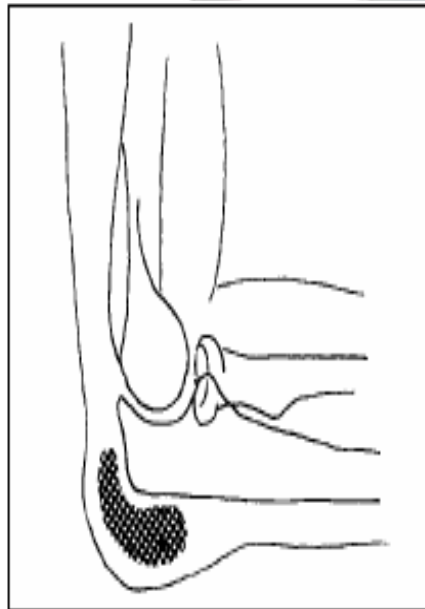


Figure 19.11

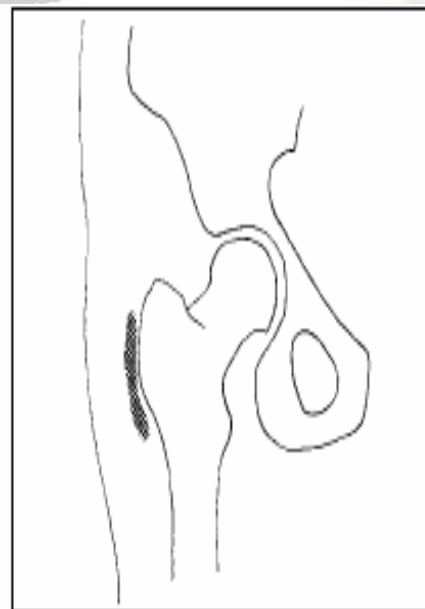


Figure 19.12

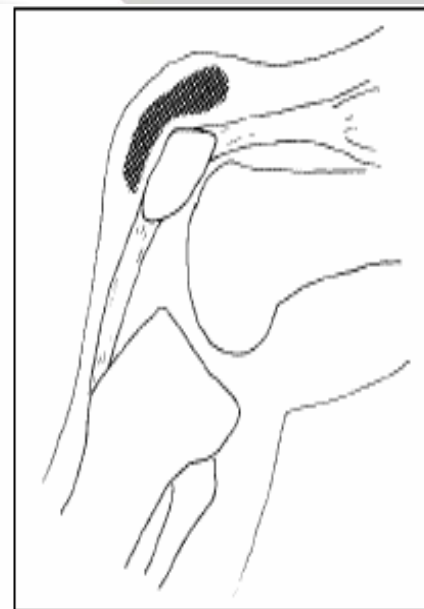


Figure 19.13



19.4 DEGENERATIVE CONDITIONS

- Tendinitis is most common at the lateral elbow, radial side of the wrist, knee, Achilles tendon at the ankle, plantar surface of the foot
- Treat with rest and anti-inflammatory medication.
- Corticosteroid injections into bursa are helpful, but they should not be used around large tendons.



19.4 DEGENERATIVE CONDITIONS

Tendinitis

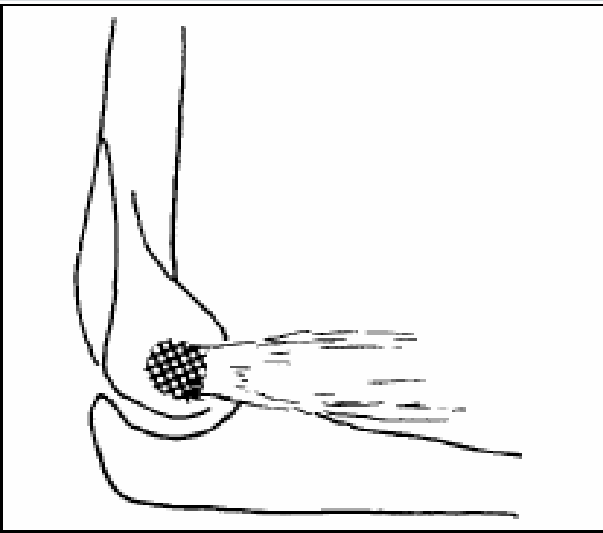


Figure 19.14

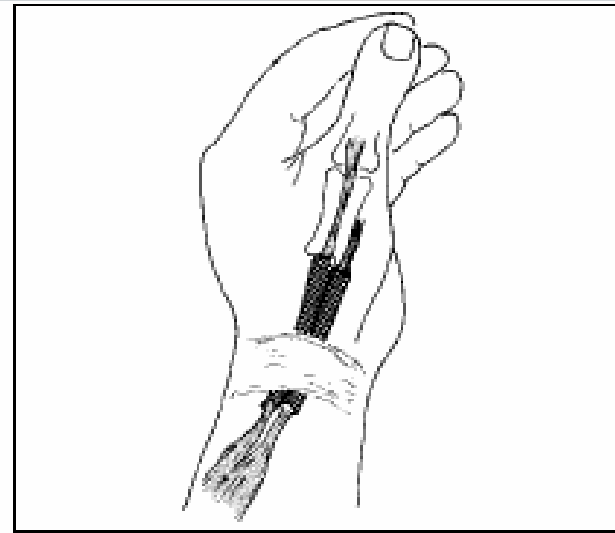


Figure 19.15

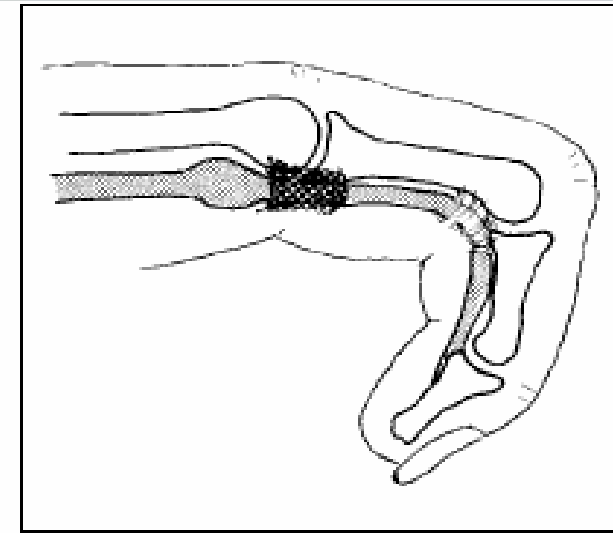


Figure 19.16

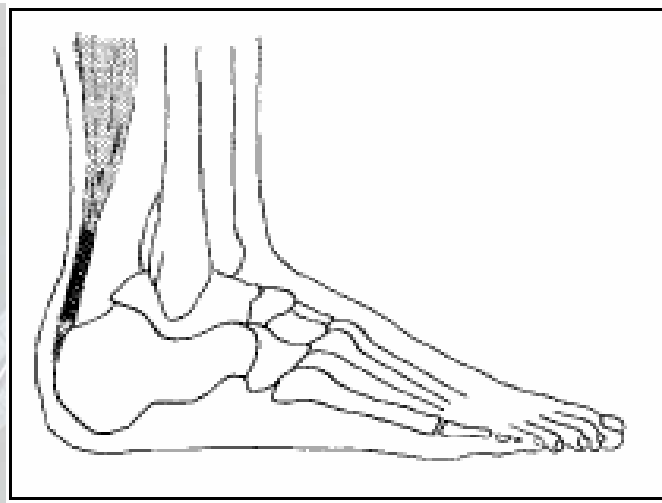


Figure 19.17

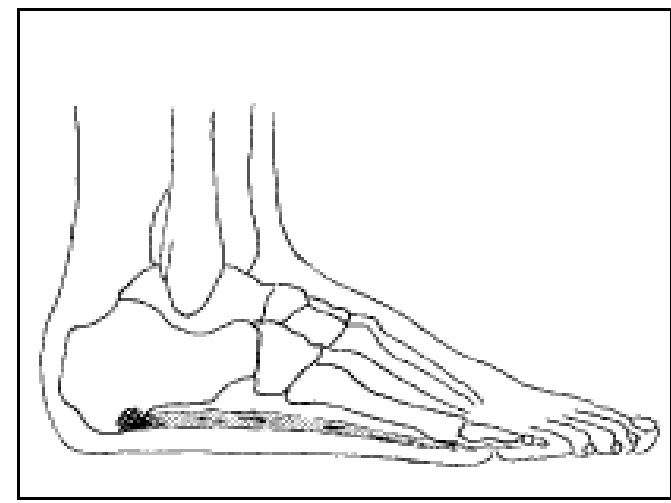


Figure 19.18