

## OSTEOMYELITIS

An acute or chronic  
Bone infection  
Staphylococcal/Streptococcal

## Osteomyelitis

- Often a secondary infection from a primary site elsewhere
- Spread is via the circulatory system
- Recent bone trauma may increase the risk of developing osteomyelitis
- Fungal infections may also cause this disease
- Incidence 2 in 10,000

## Osteomyelitis

- In children, long bones are most commonly affected
- In adults, the spine and pelvis are the most common sites affected
- Pus is produced within the bone
- Bone abscesses may also occur

## Chronic Osteomyelitis

- Results from bony tissue death from loss of blood supply
- Chronic infection may persist for years and recur intermittently
- Chronic osteomyelitis is predisposed by
  - Recent trauma
  - Diabetes
  - IV drug abuse

## Osteomyelitis



## Chronic Sclerosing Osteomyelitis



## SYMPTOMS

- Bone Pain
- Bone Tenderness
- Local Swelling and Heat
- Fever
- Nausea
- Generally feeling unwell
- Skin sinus for pus drainage in chronic infection

## Investigations

- Blood tests:
  - Elevated white blood cell count
  - Elevated ESR
  - Blood cultures for causative agent
- Biopsy of bone
- Needle biopsy of vertebral space
- X-ray

## Treatment

- The objective of any treatment is to eliminate the infecting agent and prevent to development of a chronic infection
- Initial Treatment – High dose intravenous antibiotics.
- Usually broad spectrum AB's but may be changed dependent upon results of culture

## Treatment

- In chronic infection, surgical removal of dead tissue is indicated
- The space created is packed with bone graft material
- Antibiotic therapy is continued for at least 3 weeks

## Treatment

Osteomyelitis may develop as a complication of prosthetic joint replacement

Treatment requires antibiotic therapy and/or Removal of infected tissue and prosthesis  
Replacement of prosthesis may be immediate or delayed until a later date

## Prognosis & Complications

- The prognosis of acute osteomyelitis is usually good with adequate treatment and complete resolution is normally possible
- Chronic osteomyelitis has a worse prognosis, even with surgical treatment.
- Persistent, chronic osteomyelitis may result in limb amputation