OSTEOMYELITIS

Osteomyelitis is an infection of the bone by micro-organisms. Osteomyelitis can be acute or chronic.

ACUTE OSTEOMYELITIS

- Primary (haematogenous)
- Secondary (following an open fracture or bone operation). Haematogeous osteomyelitis is the commonest, and is often seen in children.

CAUSES

<u>Staphylococcus aureus</u> (type of bacteria) is the commonest causative organism. These organisms reach the bone via the blood circulation. <u>Lower femoral metaphysis</u> is the commonest site.

PATHOLOGY

The host bone initiates an inflammatory reaction in response to the bacteria. This leads to bone destruction and production of an inflammatory exudate and cells (pus).

DIAGNOSIS

The diagnosis of acute osteomyelitis is basically clinical. It is a <u>disease of childhoo</u>d, more common in <u>boys</u>, probably because they are more prone to injury.

PRESENTING COMPLAINTS

The child presents with an <u>`acute onset of pain</u> and <u>`swelling at the end of a bone</u>, associated with systemic features of infection like <u>`fever</u> etc.

TREATMENT

Early, adequate treatment of acute osteomyelitis is the key to success. The child is admitted to hospital and investigated.

COMPLICATIONS

- General complications: In the early stage, the child may develop septicaemia and pyaemia. Either complication, if left uncontrolled, may prove fatal.
- Local complications: most of complications are because of <u>'delay in diagnosis</u>, and <u>'inadequate treatment</u>. One of the common complication is <u>chronic osteomyelitis</u>

SECONDARY OSTEOMYELITIS

This condition arises from a wound infection in open fractures or after operations on the bone.

CHRONIC OSTEOMYELITIS

the term 'chronic osteomyelitis' is used for chronic pyogenic osteomyelitis. Causes of chronic osteomyelitis are tuberculosis, fungal infections etc.

PRESENTING COMPLAINTS:

A chronic discharging sinus is the commonest presenting symptom.

TREATMENT

One of treatment methodes is <u>amputation</u>: it may, very rarely, be preferred in a case with a long standing discharging sinus, especially if the sinus undergoes a <u>malignant change</u>.