

THIRD SESSION: SOME SURGICAL PROBLEMS

Osteomyelitis and Septic Arthritis in Infancy

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Discussion:

OSTEOMYELITIS AND SEPTIC ARTHRITIS IN INFANCY

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(A) Osteomyelitis and Septic arthritis are *Surgical Conditions* needing *Surgery* and *early surgery* to save joints and avoid years and years of disability. We all know that Osteomyelitis usually starts as a *Metaphysitis*. Why do we so often have to treat *Diaphysitis* – *remove 10" sequestra* – *treat ruined* deformed joints? Because early surgery was *not* provided. *Pain means Tension* in Osteomyelitis and Septic Arthritis – *Tension* means stripping up more Periosteum and more extensive *bone death* – with sequestra and chronic Osteomyelitis.

(B) *Diagnosis:*

- (1) A normal X-ray
- (2) A painful bone or joint
- (3) An appreciable rise in temperature *is* Osteomyelitis and/or Septic Arthritis.

(C) *Treatment:*

1. Full doses of 2 appropriate antibiotics should be given more than 18 hours to produce an effect.
2. *Do not* raise dose – you should have started with the right dose for Weight of Infant yesterday!
3. *Do not* change antibiotic – you can go on doing that for days.!!!
4. *Do not* wait for the result of the blood culture
5. *Notethe Child's pain* which is the tension in the bone and *let out the pus*. The temperature will come down and the pain will go with appropriate immediate surgery.

For Septic Appendicitis you request immediate surgery for Septic Arthritis and Osteomyelitis, you must request immediate surgery. The stakes may not be life but serious crippling and years of sinuses and invalidism demand similar alert appreciation of *the Risks of Non-operative, treatment*.

(D) *Infants* often manifest specific features (1) occasionally much less temperature (2) less pain as periosteum and capsule yield more readily (3) and frequency of hip involvement. Osteomyelitis of the upper end of the femur is remarkably common in Infants; this lies within the hip joint and Septic Arthritis is inevitable. Septic Epiphysitis may also be commoner.

(E) Septic Arthritis of the Hip in Infancy is not uncommon.

Results may be:—

- (a) Pathological Dislocation of hip.
- (b) Pathological Dislocation with destruction of Capital Epiphysis.
- (c) Pathological dislocation with Displacement of Capital Epiphysis.
- (d) Destruction of Growth plate.
- (e) Resolution with Coxa Magna.

The importance of Dislocation and displacement of the Capital Epiphysis is evident and *the Abducted Position* is much to be Encouraged and preserved – the Epiphysis and femoral head are stable in this position.

All osteomyelitis in children is the result of Bacteraemia 5 ccs of blood in a big child produces a positive blood culture, so it is a fairly profuse bacteraemia. It is remarkable that multiple lesions are not commoner – however they are quite frequent.

When the limb pain is mild and joint movements relatively free and the temperature very high and the child very ill, then *Septicaemia* or widespread soft tissue lesions may be as present with the associated Orthopaedic Lesions. Pneumonitis and Septic Pericarditis may dominate the scene. *Orthopaedic Lesions give pain* and if the pain is not great then a soft tissue cause is more likely to be the dominating condition. However, in infants we do have the problem of septic arthritis and osteomyelitis appearing to occur with less evident pain.

(G) If I have left you with some resolve to *call in the Orthopaedic Surgeon Early* and to realise that *a Follow up is into Adult life in this Condition*, I will have felt well regarded for my efforts.