

# Pseudoarthrosis Formation In A Child With Chronic Osteomyelitis Of The Femur - A Case Report

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## INTRODUCTION:

Pseudoarthrosis is a complication of non-unions in fractures. Chronic osteomyelitis can lead to complications such as pathological fractures, non-unions, and pseudoarthrosis formation.

## REPORT:

We present the case of a 4 year old Sabahan girl who developed Pseudoarthrosis of the Right Femur after Chronic Hematogenous Osteomyelitis secondary to Methicillin-Resistant Staphylococcus aureus (MRSA) Septicaemia with Right Femur Subperiosteal Abscesses and Osteomyelitis at the age of 16 months.

She was initially presented with URTI symptoms, and urticaria that spread from the face towards the neck, upper limbs and lower limbs. The child also developed swelling and pain of the right knee and thigh. Blood cultures yielded Methicillin-Resistant Staphylococcus aureus. She was treated with an extended course of IV Antibiotics and multiple drainage and debridement. Intraoperative cultures yielded the same organism. Infectious parameters subsequently improved.

As she recovered, healed, and progressed, she started walking. Upon follow-up, she had developed a Pseudoarthrosis over the affected femur. The child then subsequently underwent Pseudoarthrosis resection, Autologous Bone Grafting & Ilizarov External Fixation (IEF). During post-operative clinic follow-up, abundant callous formation was seen and at 4 months post-operatively, radiological union was achieved and hardware was removed. At 5 months post-operatively, consolidation was observed.



**Figure 1: Femur pseudoarthrosis formation**



**Figure 2: Post-operative bone consolidation observed**

## CONCLUSION:

Chronic Osteomyelitis may lead to occult pathological fractures, and can lead to pseudoarthrosis formation in young children. Absolute eradication of infection, followed by resection of pseudoarthrosis, bone grafting and correct skeletal stabilization will assist in achieving union.

## REFERENCES:

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