

RARE CASE OF PSEUDOMONAS AERUGINOSA ASSOCIATED PATELLAR OSTEOMYELITIS IN PAEDIATRIC

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Introduction: Patellar osteomyelitis is an extremely rare infection that predominantly affects children. Diagnosis often been delayed due to its rarity and variable presentation. The most common microorganism is *Staphylococcus aureus* and osteomyelitis commonly affected long bones. We report a 10-year-old girl with patellar osteomyelitis caused by an unusual causative microorganism (*Pseudomonas aeruginosa*).

Discussion: A 10-year-old girl had alleged fall one year ago with deep laceration wound over the left knee. She underwent wound debridement, arthrotomy-washout and pull through suture left patella. She discharged well after the operation and she defaulted follow up. One year later, she presented to clinic with left suprapatellar pain associated with pus from the previous scar for the past 6 months. Blood investigation showed Erythrocyte-Sedimentation-Rate (ESR)-94mm/h, C-Reactive-Protein (CRP)-231.8mg/dl and high white cell count. Other blood results and blood cultures revealed normal. X-ray of the left knee patella showed osteomyelitis. She underwent surgical debridement and sequestrectomy of left patella. Culture of *Pseudomonas aeruginosa* was yielded from the bone samples sent intraoperatively. She was then treated with one week of intravenous Ciprofloxacin plus Gentamycin followed by oral Ciprofloxacin for 6 weeks. ESR and CRP trends were monitored for the patient during follow up in clinic and both decreased gradually. The patient now can ambulate well and perform all daily activities.

Conclusion: Osteomyelitis remained uncommon illness among pediatric. Osteomyelitis of the patella with *Pseudomonas aeruginosa* is much rarer disease that can be easily missed and delayed due to variable clinical presentations. ESR and CRP are sensitive markers and useful in monitoring treatment response. Surgical treatment followed by antibiotic therapy has been particularly necessary in cases with evidence of sequestration. Diagnosis should be considered in all patients with patellar swelling and pain to prevent any delayed in treatment.