

**PP-200****Leishmania infection of a knee megaprosthesis: a case report**

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Introduction: Deep infection represents one of the most common threats after limb salvage surgery and megaprosthetic reconstruction. The most common pathogens are Staphylococcus and Streptococcus species. However, atypical pathogens shouldn't be excluded, because of the fact that most patients undergoing these procedures are immunocompromised due to previous chemotherapy sessions or due to the disease itself. Therefore, we present a case of bone leishmaniasis after a distal femoral megaprosthetic reconstruction.

Methods: A 19-year-old man was referred for a stage IV left distal femoral osteosarcoma. The patient responded favourably to neo-adjuvant chemotherapy and underwent distal femoral resection and reconstruction with the use of a distal femoral megaprosthesis. Adjuvant chemotherapy was administered. Four months postoperatively, the patient presented with a painful knee joint, accompanied with fever up to 39°C. His knee was swelled and had decreased range of motion, while his spleen was enlarged. Radiographic evaluation was not helpful and laboratory tests showed pancytopenia. The patient did not respond to treatment with wide spectrum antibiotics. A technetium-99m methyldiphosphonate bone scan and a sulesomab-monoclonal antibody leukoscan were conducted, showing increased uptake at the lateral femoral condyle. Needle biopsy of the condyle revealed Leishman – Donovan bodies confirming the diagnosis of bone leishmaniasis.

Results: The patient received treatment with amphotericin B for 10 days and gradually became afebrile. One month later, the patient was asymptomatic and iliac crest bone marrow aspiration was negative. However, 9 months postoperatively, the patient died because of osteosarcoma lung metastases.

Conclusion: Although periprosthetic infections of megaprotheses are common complications of limb salvage surgery, the pathogens aren't always that common. Immunosuppression and cancer itself predispose to rare opportunistic infections, such as leishmaniasis in our case. The physician should be aware of the possibility of an uncommon infection, especially when the clinical, radiological and laboratory evaluation seem uncommon.