Necrotising fasciitis post LRS surgery for fibrous non-union right femur

^{1,2}Norkhairul H

¹Department of Orthopaedic, Hospital Sultanah Nurzahirah, Kuala Terengganu. Department of Orthopaedic, Universiti Sains Malaysia, Kubang Kerian.

INTRODUCTION:

Necrotizing fasciitis (NF), an orthopaedic emergency, is a severe, progressive necrotizing infection of the fascia, subcutaneous tissue, and muscle. We describe a patient who developed NF of the right femur two weeks after limb reconstruction system (LRS) surgery for a nonunion right femur.

REPORT:

A 39-year-old female with underlying diabetes mellitus, hypertension, eczema, and 2 weeks post bone resection, acute docking, and limb reconstruction system (LRS) surgery for a fibrous, non-union right femur presented with maggot infestation from the post-surgical wound and serous discharge for 2 days prior to admission. Otherwise, the patient has no fever. Clinically, the patient does not appear to be septic and appears to be comfortable in the room air. Vital signs were Bp: 113/76mmHg, Pr: 100x/min, SPO2: 96%, T: 37, and blood glucose: 8mmol/L. Local examination of the right thigh revealed erythematous skin, minimal pus discharge, and the presence of maggots. Septic parameters on admission were TWC: 12.9, ESR: 120 mm/h, and CRP: 90 mg/L. A plain radiograph of the right femur showed a gas shadow over the proximal femur. This patient underwent surgery for wound debridement and tissue sampling. The intraoperative findings showed foul-smelling discharge, pus discharge from the proximal pin, and pus with sloughy tissue involving the lateral compartment all the way from the fat layer to the fascia and part of the muscle. Empirical antibiotics with IV tazocin 4.5g qid and clindamycin 600mg tds were started after tissue sampling. Intraoperative culture results showed mixed growth of organisms. Septic parameters post operation have improved; TWC 9.2, ESR 120 mm/h, and CRP 38.8 mg/L.

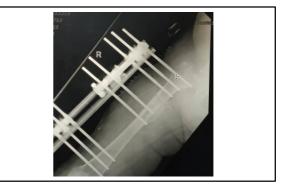


Figure 1: X-ray right femur Day 1 post LRS surgery



Figure 2: X-ray right femur 2 weeks post LRS surgery showing presence of gas shadow over proximal femur

CONCLUSION:

Although pin site infection is more common in patients with an external fixator, a less common diagnosis but dreadful condition such as NF should always be ruled out. Prompt recognition of the signs and symptoms of NF and early surgical debridement are very crucial to prevent a dreadful sequela.

REFERENCES:

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