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COMMENTARY

A Devasting Course of an Iliopsoas Muscle Abscess Subsequently Leading to Septic Shock, Septic Hip Arthritis, and Extended Gluteal Soft Tissue Necroses in an Elderly Immunocompromised Patient with Multiple Carcinomas: A Case Report and Brief Review of Literature

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1. CLINICAL ISSUE

Clinical diagnosis of infectious back and hip anatomical regions are challenging. Although the “classic” triad for iliopsoas muscle abscess was described more than a hundred years ago, it is certainly not very frequent. Despite being a rare condition, most references are cases reports in the literature, and it is not clinically suspected very often. Due to the increasing number of immunocompromised patients nowadays in most countries, like the one with malignancies, the diagnostic difficulties are increasing. Painful back and hip conditions should be considered with caution in these patients in order to prevent severe septic cases like the one presented here.

The anatomical region needs to be properly understood. Differential diagnoses considers many other conditions that may misdiagnose an iliopsoas muscle abscess: urogenital or colorectal infections as well as other more common conditions, like appendicitis which are usually more frequently encountered, however, in very complex cases like this patient, 69 years old with multiple carcinomas and abdominal and retroperitoneal surgeries, this condition is an important possibility.

2. CLINICAL PRESENTATION AND MANAGEMENT

The severe consequences from this infection can be critical. Initial management in the intensive care unit includes complete antibiotherapy according to blood culture results and surgical abscess revision. What it is important to note is that hip joint involvement was rapidly diagnosed in this patient.

The author clearly describes not only the different hip findings, including osteomyelitis, but the arthroplasty-resection pro-cedure was also performed. Despite multiple debridement and soft-tissue surgeries, including the use of the proximally pedicled long-head biceps femoris muscle, and medical support necessary to this complex situation, the final recovery for the patients was successfully obtained. Muscle flap coverage is critical, not only in the distal leg but proximally, where soft-tissues are theoretically less problematic, although a severe infection can compromise healthy anatomy. Despite other flaps have been described for this purpose like vastus lateralis [1], the author recommends utilizing the proximally pedicled long head biceps femoris muscle 180° turnover flap including newer references [2, 3]

3. CONSIDERATIONS

Thorough knowledge of clinical suspicion of painful back and hip conditions must be considered in complex patients with multiple surgeries and co-morbidities. Septic conditions must be properly stabilized and a complete clinical, laboratory, microbiological and imaging test work-up must be done at this stage. A multidisciplinary approach can improve the prognosis for infectious conditions like these. Professionals in the intensive care unit should contact different surgeons for the best management in this case.

To date, a particular consideration is the current indication for arthroplasty-resection of the hip, the so-called Girdlestone procedure. First described to treat tuberculosis disease of the hip, however, it is still performed to control infectious conditions like the one presented here [4]. Thus, despite the fact most surgeons not accepting this status in most patients, in cases like this it can heal a hip infection with an acceptable functional result. This is also important to know for severe periprosthetic joint infections with recurrent positive intra-

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operative cultures after reimplantation and after a relatively short period of time like six or eight weeks from the first stage debridement and removal of a total hip arthroplasty. In the same way, similar clinical results are obtained to those of aseptic revision total hip arthroplasties cases when reimplantation is done many years after the arthroplasty-resection procedure [5]. It is also important to note that an iliopsoas abscess can be an unrecognized source of infection to a total hip arthroplasty, recently, Lawrenz *et al.*, reported five cases with poor patient outcomes caused by resistance to standard treatment protocols for periprosthetic joint infections and multiple surgeries required [6]. Case reports like this add important information for the Orthopaedic Surgeon

REFERENCES

- [1] Rodríguez-Rosales G, Cebrián-Parra JL, Francés-Borrego A, Marco-Martínez F, López-Durán Stern L. Treatment of a recalcitrant hip infection with a vastus lateralis muscle flap. *Rev Esp Cir Ortop Traumatol* 2012; 56(6): 439-43.
- [2] Bertheuil N, Huguier V, Aillet S, Beuzeboc M, Watier E. Biceps femoris flap for closure of ischial pressure ulcers. *Eur J Plast Surg* 2013; 6(10): 639-44. [http://dx.doi.org/10.1016/j.recote.2012.10.003] [PMID: 23594941]
- [3] Demirseren ME, Ceran C, Aksam B, *et al.* Clinical experience with the combination of a biceps femoris muscle turnover flap and a posterior thigh fasciocutaneous hatchet flap for the construction of ischial pressure ulcers. *Ann Plast Surg* 2016; 77(1): 93-6. [http://dx.doi.org/10.1097/SAP.000000000000290] [PMID: 25057917]
- [4] Cordero-Ampuero J. Girdlestone procedure: When and why. *Hip Int* 2012; 22(Suppl. 8): S36-9. [http://dx.doi.org/10.5301/HIP.2012.9568] [PMID: 22956380]
- [5] Garcia-Rey E, Cruz-Pardos A, Madero R. Clinical outcome following conversion of Girdlestone's resection arthroplasty to total hip replacement: a retrospective matched case-control study. *Bone Joint J* 2014; 96-B(11): 1478-84. [http://dx.doi.org/10.1302/0301-620X.96B11.33889] [PMID: 25371460]
- [6] Lawrenz JM, Mesko NW, Higuera CA, Molloy RM, Simpfendorfer C, Babic M. Treatment challenges of prosthetic hip infection with associated iliacus muscle abscess: Report of 5 cases and literature review. *J Bone Jt Infect* 2017; 2(3): 127-35. [http://dx.doi.org/10.7150/jbji.16429] [PMID: 28540149]

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