ISSN No:-2456-2165

Morel Lavelle Lesion- A Case Report

Dr. Darshan Udyavar[1]; Dr. Alfred Lobo[2*]
Father Muller Medical College and Hospital

Corresponding Author: Dr. Alfred Lobo[2*]

Abstract:- A 33 year old male, presented to the Emergency department with history of sustaining injuries to his upper limbs and lower limbs. Relevant radiographs showed fractures at the pelvis, right wrist and left leg and patient underwent surgical fixation. Swelling and pain in the right thigh on evaluation showed Morel Lavelle lesion for which suction drain was applied. The same was removed after 1 week once the swelling subsided. During follow ups, it was observed that the patient recovered well and was able to ambulate a month after the trauma.

Keywords:- *Morel Lavelle Lesion. Suction Drain.*

I. INTRODUCTION

First described in 1863, Morel Lavelle lesion was called a closed traumatic soft-tissue degloving injury. Due to shearing force, a space is created between superficial and deep fascia. This leads to accumulation of hemolymph. [1]

As this progresses, a cystic lesion is formed. This is commonly noted in high energy trauma such as road traffic accident involving the pelvis and thighs. It can often get un-noticed depending on severity of trauma.

II. CASE REPORT

A 33 year old gentleman sustained injuries to his upper limbs and lower limbs following a road traffic accident. On evaluation, radiographs showed Type-1 Open fracture(Gustilo Anderson's classification) of shaft of left tibia and fibula, Volar Barton's fracture at the right distal radius, Pubic diastasis and Zone-2 fracture(Denis classification) of the sacrum. Patient underwent Open reduction and plate fixation for distal radius fracture, Closed reduction and IMIL nail fixation for fracture of left tibia. Swelling and pain was noted at the right thigh on evaluation which gradually increased over 2 days. Ultrasound done showed hypoechoic collection superficial to deep fascia measuring 18.5x5.8x10.7cm, suggestive of Morel Lavelle lesion. Hand and Microvascular surgeon opinion was taken, an incision was made at the anterolateral thigh proximal to the collection and suction drain was applied with 14 Fr. Catheter. Regular dressings were done and compression bandage was applied to prevent accumulation into dead space. As the swelling subsided, the drain was removed. Subsequent follow ups of the patient once discharged, showed resolving lesion and patient was gradually made to bear weight.

III. DISCUSSION

A Morel Lavelle lesion can occur in high impact traumas especially affecting the pelvis and thighs. Early identification of the lesion is critical to avoid surgical site infection.[2]

The clinical presentations of an isolated MLL without fractures are non-specific and include pain, ecchymosis, swelling, and fluctuating sensations in the injured area. In the early stages of injury, the MLL is not easily distinguished from soft tissue injury. [4]

Small collections less than $50cm^3$ are managed conservatively with local ice pack application, compression dressing and analgesics or percutaneous aspiration. Collections more than $50cm^3$ undergo incision and drainage(single or dual).

Initiation of appropriate antibiotics reduces the risk of infection.

IV. CONCLUSION

A thorough clinical examination is essential to prevent misdiagnosis of Morel Lavelle lesion. It is necessary to observe for signs of skin necrosis, increase in soft tissue swelling and pain. Treatment for these lesions depend on the size and severity of the lesion. Early recognition helps initiate early treatment which further improves rehabilitation thereby reducing morbidity.

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