

Case Report – Late Presentation Of Massive Morel-Lavallée Seroma (Post Traumatic Pseudocyst) Of Thigh

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INTRODUCTION:

Morel-Lavallée seroma (MLS) or post-traumatic pseudocyst is a rare condition where soft tissue seroma is developed following a closed traumatic degloving injury. It was first described by French surgeon Victor Auguste Francois Morel-Lavallée in the mid-19th century¹. Though well described in the orthopaedic trauma literature, but it is often not recognized by the surgeons in the initial polytrauma setting. This case report demonstrates a massive MLS which was presented two months post trauma with a massive swelling over right thigh.

CASE REPORT:

Patient is a 19 years old gentleman who was first presented to the hospital due to motor vehicle accident where he sustained multiple fracture over left upper limb and left lower limb. Open reduction and internal fixation were done. Throughout the admission patient had no complain of the right thigh. However, two months post trauma, patient was seen at the clinic and noted a massive swelling over right thigh measuring 60cmx34cm. The swelling was painless and gradually increasing in size. On examination the swelling was fluctuant and transillumination test was positive. X-ray femur shows no fracture, ultrasound shows a large heterogeneous hypoechoic collection with echogenicities seen within the swelling. Incision drainage was done, where 4 liter of serous discharge was drained out with 500g of necrotic fat was removed.



Figure 1: Massive swelling with necrotic fat removed

Subsequently multiple open debridement and negative pressure V.A.C were done. Patient's wound shows good granulation tissue upon discharge.

DISCUSSION:

MLS is usually caused by a shearing force in a cylindrical structure causing severe traumatic separation of panniculus adiposus beneath the dermis from the underlying deep fascia. This shear injury disrupts perforating vessels and produces a potential space that fills with blood, lymph, seroanguinous fluid or necrotic fat².

Morel-Lavallée mechanism

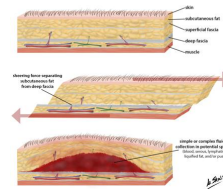


Figure 2: Morel-Lavallée mechanism

CONCLUSION:

MLS is often treated by open debridement. It is suggested that open debridement should be considered over percutaneous drainage because open debridement allows for complete removal of necrotic fat which can serve as nidus for infection³. Prompt detection is crucial to facilitate early surgical intervention to prevent further complication.

REFERENCES:

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