

MOREL-LAVALLÉE LESION: AN ELUSIVE COUNTER



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INTRODUCTION

Morel-Lavallée lesion (MLL) is a closed degloving injury of the soft tissue that occurs deep in the subcutaneous plane. It has gain popularity in recent years albeit it was first described in 1893. It is an uncommon entity and maybe under-reported. However, its undesired consequences such as infections, pain, extensive tissue necrosis and even death can result if failure to recognize it and intervene timely. Herein, we share a case of a young man presented to us post trauma and succumbed due to undiagnosed MLL.

CASE REPORT

A 31-year-old morbidly obese man with newly diagnosed diabetes mellitus presented with left upper thigh, left hip and left flank pain for 4 days. He was involved in a motor-vehicle-accident 2 weeks ago where his motorbike skidded, landing on his left side. The pain worsened causing him unable to ambulate. On examination, he was alert, and his vital signs were within normal range. His abdomen was soft, small bruises over the left flank and minimal tenderness on the left flank, left inguinal region and left gluteal.

No obvious deformity on the left hip and range of movement was full. FAST was negative. Other systemic examination was unremarkable. At that point of time, a provisional diagnosis of soft tissue injury was made.

Unfortunately, the patient deteriorated and succumb to death after 20 hours of hospitalization. Post-mortem revealed extensive subcutaneous hemorrhage at left anterolateral wall of abdomen consequence to blunt force injury.

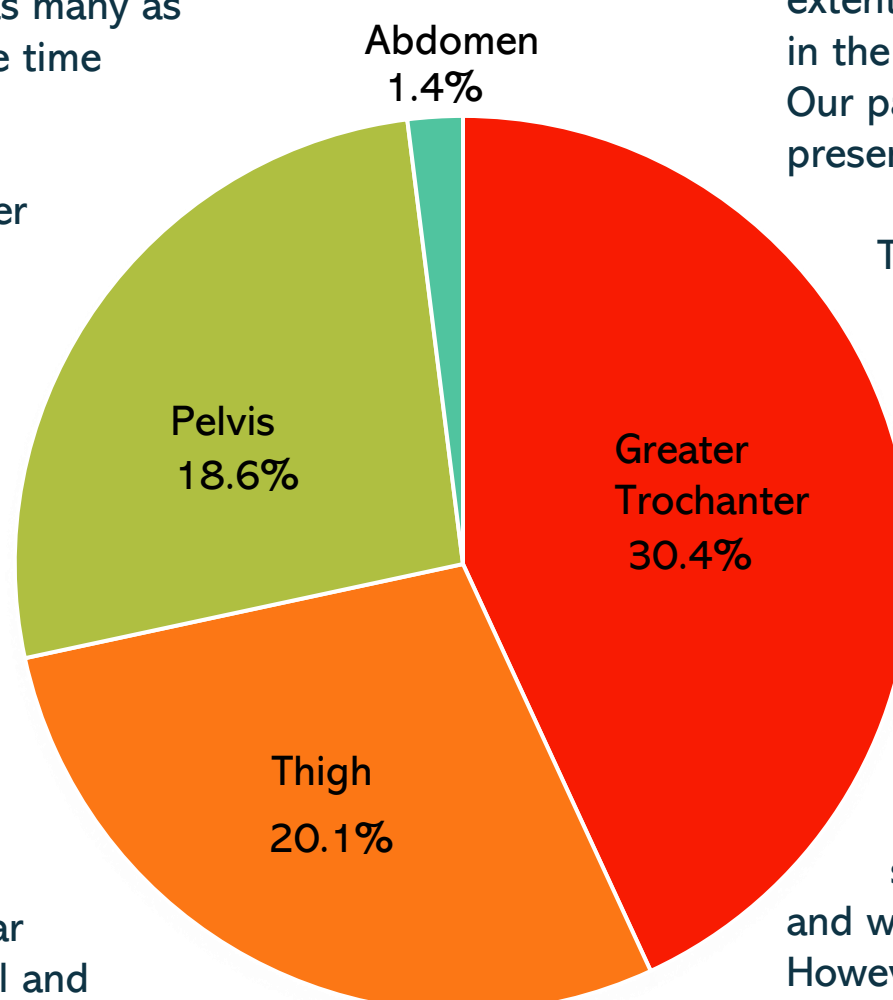
DISCUSSION

MLL is often delayed or misdiagnosed due to delayed presentation or presence of distracting injuries in a trauma patient. A study estimated that as many as 30% of MLL were undiagnosed during the time of presentation¹.

MLL most commonly occur near the greater trochanter (30.4%), thigh (20.1%) and pelvis (18.6%). However, MLL can still be found at other parts of the body; our patient's lesion was at the anterolateral of the abdomen which the incidence is only 1.4%². MLL may be associated with fractures or may also occur with blunt trauma in the absence of fracture³.

Severe shearing forces during trauma can result in separation of the hypodermis from the underlying deep fascia creating a potential space. This shear force disrupts the perforating blood vessel and lymphatic resulting in hemolympathic fluid collection. If left untreated, the inflammatory reaction ensues and may progress into a fibrous capsule in the potential space. This fibrous capsule impedes resorption thus causing fluid re-accumulation and imposes risk of infection and tissue necrosis.

MLL may present immediately or may appear day after injury. This occurrence can be attributed to the extent and rate of hemolympathic accumulation in the dead space and the patient's body habitus. Our patient was obese with BMI > 25 and presented to us after 2 weeks of trauma.



The most important clinical significance in this case demonstrates that the knowledge of MLL among medical practitioners is limited with most unable to recognize MLL. Our patient was first treated for soft tissue injury. Although there was evidence present in the history, physical examination and lab investigation, due to its rarity the diagnosis was not made, and further imaging did not follow. Hence the diagnosis was missed, and the patient succumbed. Ultrasound can be done in ETD and will demonstrates an anechoic lesion. However, MRI is the modality of choice to confirm the diagnosis.

Treatment options range from conservative to surgical intervention depending on the lesion size and location.

CONCLUSION

MLL is an uncommon entity but can lead to devastating consequences. Awareness among the frontliners should be built in order to save life.

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DECLARATION OF CONFLICT FOR ALL AUTHORS

All authors declare THERE IS NO CONFLICT OF INTEREST.