

Large Morel-Lavallée lesion in lumbo-sacral spine trauma

Thirumurugan K; Ong KL; Nor Azlin ZA; Basir T

Department Orthopedic Surgery and Traumatology, Hospital Sungai Buloh

INTRODUCTION:

A Morel-Lavallée lesion (MLL) is a closed degloving injury that occurs due to excessive shearing force, resulting in the separation of the hypodermis from the underlying deep fascia and the formation of a cavity filled with hematoma and lymph. MLL is primarily observed in the pelvic and trochanteric region, but there have also been several reported cases of MLL occurring in the lumbar-sacral region. Preoperative recognition of this soft tissue injury is essential to mitigate the risk of surgical site infection.

REPORT:

A 32-year-old man was involved in a motor vehicle accident, losing control of his motorbike while traveling at high speed. As a result, he was hurled forward and landed on his back. There was severe tenderness at lower back however there was no visible open wound (Figure 1). CT lumbosacral showed traumatic spondylolisthesis L5/S1 with bilateral facets fracture dislocation (Figure 2). The patient underwent posterior instrumentation and fusion L3-S1. Two weeks later the patient developed wound breakdown and he was taken to theatre for washout, debridement and application of a negative pressure wound therapy device (NPWT). He underwent multiple washouts and NPWT changes, followed by gradual closure by secondary wound healing.



Figure 1: Large soft fluctuant collection over back was noticed extending from thoracic to lumbosacral region

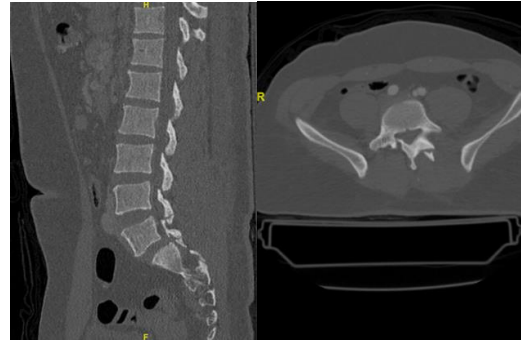


Figure 2: CT lumbosacral

CONCLUSION:

The frequency of MLL is higher than what is typically reported, and it is important to identify this lesion in the presence of a spine injury. In order to overcome the risk of infection and prevent the development of a pseudocapsule, essential surgical strategies include the use of surgical debridement and antibiotic-impregnated sponges, as well as the insertion of additional drains into the degloved cavity. Having an awareness of this injury can facilitate the development of tailored strategies aimed for best outcome.

REFERENCES:

1. Mulcahy, M. J., & Ball, J. (2018). The Morel-Lavallée lesion in thoracolumbar spine trauma—two index cases. *Journal of Spine Surgery*.