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The Unseen Injury- A Dramatic Presentation of Morel Lavallée Lesion Long After Trauma: A Case Report

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Abstract

Background:
Morel-Lavallée lesions are closed degloving injuries caused by shearing trauma, usually presenting acutely. Chronic or delayed enlarging lesions are uncommon.

CaseReport:
We describe a 54-year-old male with a swelling over the left anterolateral thigh, persisting for 20 years after a motorbike run-over injury. The lesion, initially 6×5 cm and recurrent after aspirations, remained static until trivial trauma led to rapid enlargement to 18×10 cm. Examination revealed a cystic-firm swelling with stretched, hyperpigmented skin and dilated veins. MRI demonstrated a large, well-encapsulated subcutaneous fluid collection. Wide local excision with pseudocapsule removal was performed, and recovery was uneventful.

Conclusion:
Chronic Morel-Lavallée lesions may remain dormant for years before sudden enlargement. Surgical excision is definitive, and these lesions should be considered in the differential diagnosis of chronic thigh swellings.

Keywords: Chronic seroma, Degloving injury, Morel-Lavallée lesion, Soft tissue lesion, Thigh swelling, Trauma surgery

Introduction

First described by Maurice Morel-Lavallée in 1853, Morel-Lavallée lesions [1] (MLLs) are post-traumatic closed degloving injuries where shearing forces separate the subcutaneous fat from underlying fascia, leading to fluid accumulation. While most cases present acutely, chronic or slowly progressive lesions are uncommon [2]. Here, we report a unique case of an MLL that remained stable for nearly two decades before showing sudden expansion after minor trauma.

Case Presentation

A 54-year-old male from Delhi presented with a gradually enlarging swelling over the left anterolateral thigh. Following a motorbike run-over 20 years earlier, he developed a painless 6×5 cm swelling that recurred after repeated bloody aspirations. The lesion remained static until minor trauma a year ago, after which it enlarged over 4–5 weeks to 18×10 cm. There was no associated pain, numbness, weakness, or distal edema.

Examination showed a large cystic-firm, fluctuant swelling on the anterolateral thigh with stretched, shiny, hyperpigmented skin and prominent dilated veins. The margins were ill-defined, but the mass was mobile over underlying muscle, and distal neurovascular status was intact. MRI revealed a 15 × 12 × 13.5 cm well-encapsulated subcutaneous collection with fat globules and hemorrhagic contents, T2 hyperintense and T1 hypointense, abutting and displacing the tensor fascia lata without invasion. Contrast-enhanced CT confirmed a non-enhancing

soft-tissue lesion with septations and wall calcifications, suggesting benignity.

The patient underwent wide local excision under general anesthesia. Intraoperatively, the mass was subcutaneous, adherent to surrounding tissue and tensor fascia lata, and completely excised with its pseudocapsule. The wound was closed over a suction drain. Output was 15 mL/day for two days; the drain was removed on day 4, and the patient discharged on day 5. Recovery was uneventful.

Discussion

Morel-Lavallée lesions are usually diagnosed in the acute phase after trauma [3,4]. However, chronic lesions may evade diagnosis and can be mistaken for soft tissue tumors, hematomas, or seromas [2,5]. Persistent shearing forces, repeated aspiration, and formation of a fibrous pseudocapsule contribute to recurrence [6].

MRI is the most sensitive modality for diagnosis and characterization [7,8], demonstrating the encapsulated fluid with varying signal intensities depending on the chronicity and contents.

Chronic MLLs generally require surgical excision, especially when associated with a pseudocapsule, as in this case [4,9]. Conservative treatment is rarely effective for longstanding lesions [10,11].

This case is notable for the 20-year quiescent duration with sudden re-enlargement after minor trauma—highlighting the natural history and delayed complications of inadequately managed soft tissue shearing injuries.

Conclusion

Chronic Morel-Lavallée lesions may remain dormant for decades but can enlarge suddenly. Clinicians should maintain high suspicion in patients with post-traumatic, recurrent, painless soft tissue swellings [12]. Surgical excision remains the definitive treatment for large or symptomatic lesions [4,9].

Patient Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

References

1. Tejwani SG, Cohen SB, Bradley JP. Management of Morel-Lavallée lesion of the knee: twenty-seven cases in the National Football League. Am J Sports Med. 2007;35(7):1162–7.
2. Bonilla-Yoon I, Masih S, Patel DB, White EA, Levine BD, Chow K, et al. The Morel-Lavallée lesion: pathophysiology, clinical presentation, imaging features, and treatment options. Emerg Radiol. 2014;21(1):35–43.
3. Hudson DA, Knottenbelt JD, Krige JE. Closed degloving injuries: results following conservative surgery. Plast Reconstr Surg. 1992;89(5):853–5.
4. Mellado JM, Pérez del Palomar L, Díaz L, Ramos A, Saurí A. Long-standing Morel-Lavallée lesions of the trochanteric region and proximal thigh: MRI features in five patients. AJR Am J Roentgenol. 2004;182(5):1289–94.
5. Yang Y, Tang TT. The Morel-Lavallée lesion: review and update on diagnosis and management. Orthop Surg. 2023;15(10):2485–91.
6. Nickerson TP, Zielinski MD, Jenkins DH, Schiller HJ. The Mayo Clinic experience with Morel-Lavallée lesions: establishment of a practice management guideline. J Trauma Acute Care Surg. 2014;76(2):493–7.
7. Greenhill D, Haydel C, Rehman S. Management of the Morel-Lavallée lesion. Orthop Clin North Am. 2016;47(1):115–25.
8. Malik M, Panchal A, Shah N, Bhimani Z, Eswar PS. Degloving injury presents as Morel–Lavallée lesion: a case report. Int J Case Rep Surg. 2025;7(1):118–19.
9. Schwab PE, Bourbon De Albuquerque II J, Bridgeman JT, Brown S, Kfuri M. Morel-Lavallée lesion around the knee successfully treated with video-assisted endoscopic débridement: a case report. Trauma Case Rep. 2024;51:100991.
10. Balasubramanian YK, Balasubramanian R. An unusual presentation of Morel-Lavallée lesion in the arm: a case report. Int J Res Orthop. 2020;6(6):1332–4.
11. Khan ST, Pasqualini I, Pan X, Emara AM, Piuzzi NS. Surgical management of chronic Morel-Lavallée lesion with minimal cosmetic scarring: a case report. J Orthop Case Rep. 2024;15(7):98–102.
12. Molina BJ, Ghazoul EN, Janis JE. Practical review of the comprehensive management of Morel-

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Lavallée lesions. Plast Reconstr Surg Glob Open. 2021;9(10):e3850.

Figure 1: Pre-operative image of the left thigh

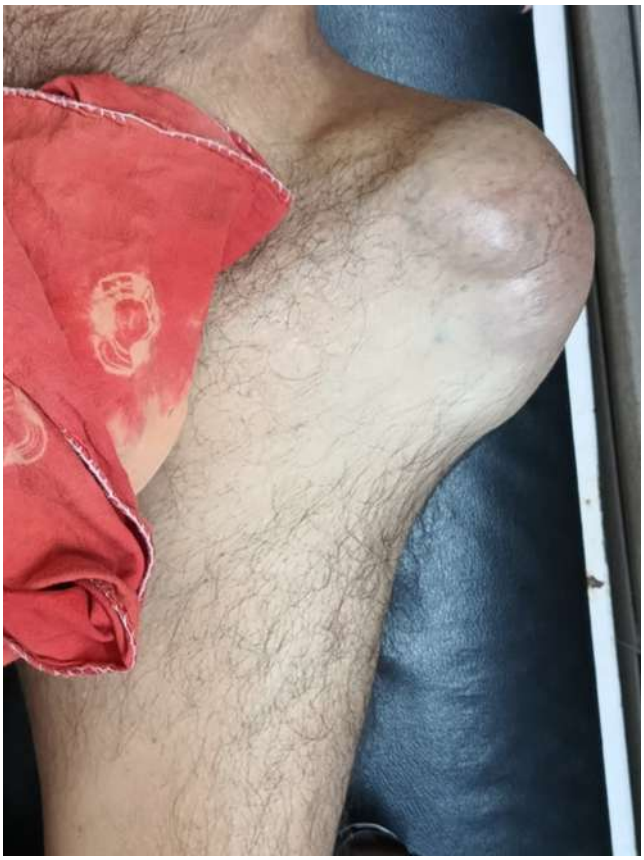

Figure 2: MRI image of the lesion

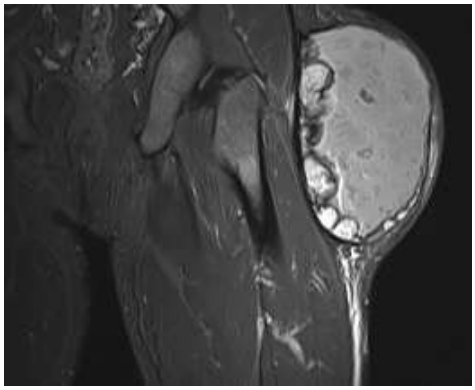

Figure 2: MRI image of the lesion

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Figure 3: Preoperative view of the swelling over the left anterolateral thigh.

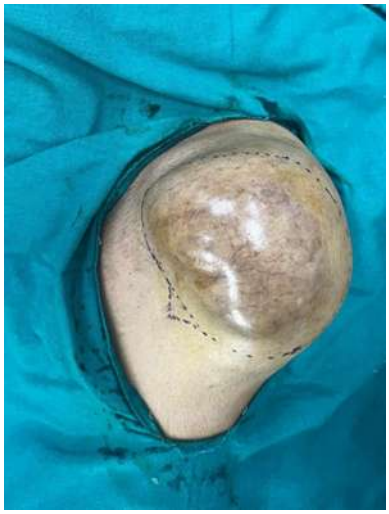

Figure 4: Intraoperative identification of the encapsulated lesion with adherence to underlying fascia.

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