Alcohol Sclerodhesis: An Innovative Treatment for Chronic Morel-Lavallée Lesions – Reply to Authors

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Commentary

We read the authors’ paper with great interest and commend them on their innovative approach to the management of a complex and chronic issue. Morelle-Lavellée lesions first described by Victor-Auguste-François Morel-Lavallée in 1848 in Paris pose a challenging management scenario for the plastic surgeon. Significant but uncommon, these soft tissue injuries occur in the context of a high-energy degloving type injury typically in the pelvis and long bones. Typically soft tissue is cleaved off the underlying fascia and bone, resulting in a pocket for haematoma, seroma and necrotic fat to collect. These lesions can be regarded as missed injuries as patients suffering from these types of injuries often have associated fractures and other more threatening injuries. Typically pelvic and acetabular injuries are screened and managed with the aid of plain x-rays and CT; however, often the soft tissue injury may be overlooked. Weeks later the patient may represent with swelling, pain, skin changes and signs of local and systemic infection. Authors present the case of a 33 year old haulier who was ran over by a HGV. He presented to the local A&E with pelvic fractures and soft tissue abrasions. He was discharged with antibiotics. He returned home local to our unit weeks later presenting with 2 day history of feeling unwell. He was complaining of progressive pain, swelling and discharge from his zone of trauma. On examination he looked in extremis. His left thigh was tense, swollen with several abrasions and blisters. Initial work up showed he was pyrexial at 39.4, tachycardic at 132 bpm and was normotensive at 110/80 mmHg. Blood workup showed CRP of 360 and WCC of 22 and ABG confirmed a respiratory acidosis and lactate of 6.1. He was referred to the local plastic surgery service who suspected a soft tissue infection or collection. He was taken to ITU for optimisation including broad spectrum high dose antibiotics, aggressive fluid resuscitation and inotropic support. Four hours later, he failed to improve and was subsequently taken to theatre. Intra-operatively his thigh was incised revealing foul-smelling ‘dirty dishwater’ type fluid which was sent for MC+S. Approximately five litres of this fluid mixed with altered coagulum were removed using suction and betadine and peroxide washout. The wound was packed with betadine soaked gauze. The patient made a full recovery and a topical negative pressure device together with dressing was applied to the wound for 6 days to facilitate healing and wound shrinkage. He underwent delayed grafting and was discharged at day 13. Despite his good recovery he attended the dressing clinic nine times for aspiration of seroma from his thigh, with large volumes (300 mls – 400 mls) of tissue fluid being removed in the initial aspirations.

Photograph

Perhaps the post-operative management of such patients is the most difficult. Is there a role for triamcinolone injection in the outpatient setting to reduce fluid production. Arguable quilting sutures could be used to minimise dead space, however often the soft tissues are swollen and therefore this may not be possible in the preliminary visits to theatre. Recent studies highlight the merits of MR scanning to delineate these lesions and their nature. This modality is beneficial in identifying signal behaviour, intensity, and morphology and enhancement pattern. There however could be a role for tissue glue as evidenced in latissimus dorsi donor sites in breast reconstruction as well as in craniofacial reconstruction literature. Further work in this area is needed exploring other strategies to facilitate optimum wound healing and limitation of seroma formation.

References