Degloving Injury Of Leg, An Unusual Complication Of Manual Traction While Reducing A Dislocated Total Hip

A Ghani, N Venkatram

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Abstract

Degloving injury of skin of leg is an unusual but a major complication of manual traction. The authors report an abrupt full thickness skin degloving of lower leg, while reducing a dislocated total hip replacement in an elderly patient. This is a very rare complication and perhaps can be prevented with a high index of suspicion and cautious approach especially in old and frail patients.

CASE STUDY

A 84 year-old lady who was presented to A&E with a history of mechanical fall and admitted to Orthopaedics, with a clinical diagnosis of dislocated total hip replacement (THR). The primary surgery (THR) was performed 8 years ago. She did not have any significant past medical history except hypertension which was under Control with medications. There was no history of any skin disorder. Patient was taking regular atenolol and occasional Paracetamol. There was no history of steroid intake or any other prolongs medications. She had a reasonable functional out door mobility with the help of a single stick.

On examination she was a thin built lady, stable medically and there were no skin lesions or any neurovascular deficit or any signs of varicose veins.

Patient was taken to theatre for reduction of dislocation under general anaesthesia. While applying manual traction (usual technique), suddenly there was an avulsion of a large full thickness skin flap involving the whole posterior aspect of lower leg from the poplitial fossa to distal third of lower leg, but it was attached medially and distally. We could successfully reduce the dislocation by holding and pulling distal thigh, with knee in flexion. An attempt was made to re-attach and suture the skin flap with 3-0 nylon, but in view of very thin and frail skin there was no hold on flap and frequent cut through was a problem. As it was a large flap steristrips also were not holding the flap back. Then using staples skin was successfully approximated. Wound was dressed using non-adhesive dressing. Post-operatively wound was regularly dressed with non-adhesive dressing. There was minimal marginal necrosis but no signs of inflammation. Eventually wound was healed well in around three weeks.

Because of this complication there was a definite delay in mobilisation and rehabilitation of the patient. This has also led to a prolong hospital stay. She was discharged in four weeks from the hospital.

DISCUSSION

Degloving of skin as a complication of manual traction is an unusual complication and a serious skin lesion ([1]). We could not come across of such a report in the existing literature, although deep skin slough following the skin traction device for hip fracture in elderly patients has been reported by Shabat S et al. in 2002 ([1]). According to them the most common associated chronic illness was cardiovascular, in patients with such complications.

There was no pre-disposing factor for fragile skin or any existing local lesion. Neither there was any neurovascular deficit. Most probable reason however for this complication in our report was the old age and frail skin.

So a high index of suspicion and cautious approach in handling such patients (elderly with frail skin) especially while applying traction is required in old and frail patients ([1]).By anticipating and avoiding such complications, patient' morbidity will be less and rehabilitation will be better and

faster ($_1$).

CORRESPONDING AUTHOR

Dr.A.Ghani 9 Hospital Way London SE13 6UF Phone: 02084650931, 07737982032 E-mail: drghani31@rediffmail.com

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Author Information

Abdul Ghani, MBBS, MS, MRCS
Senior Clinical Fellow Orthopaedics, University Hospital Lewisham

N.K. Venkatram, MBBS,MS, MRCS
Senior Clinical Fellow Orthopaedics, University Hospital Lewisham