“Rubber Band Syndrome of the Arm”

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Dear Sir,

A 5 year old girl was brought to the plastic surgery outpatient clinic for the treatment of a discharging sinus within a circumferential scar in the right arm of 6 months duration. The scar was found to be unstable with firm consistency and multiple discharging sinus within the scar. The rest of the limb was clinically normal [1]. The scar and the sinus history dates back to 9 months where the girl had sustained fracture of the arm managed by a local bone setter. The parents noticed the scar and the sinus after the removal of wooden sticks used for immobilization. The radiograph showed united fracture shaft of humerus with no evidence of osteomyelitis. The blood parameters were normal. Considering the clinical and radiological bone union with a discharging sinus in the circumferential scar, we had planned for exploration, excision of the unstable scar and soft tissue cover by multiple Z plasties. Interestingly, on exploration we found a very unusual rubber band embedded circumferentially (Fig. 1) inside the scar along the subcutaneous plane which could be the reason for the discharging sinus. Thorough wound debridement, removal of the band and soft tissue cover was done. The girl was comfortable in the post-operative period and was discharged. The wound healed and the girl was symptom free since then.

There has been few literature studies which described unusual foreign bodies tied circumferentially in the limbs for various reasons which later cause serious constriction bands, ulcers, discharging sinus and compartment syndrome [2–4]. These circumferential constricting foreign bodies produce inherent heat on stretching and coolness on relaxing. This thermodynamics makes the rubber band gradually

Fig. 1 Intra-operative picture showing rubber band being in the arm

breach the skin and remain in the planes of the limbs depending upon the place and its position. Our case is an unusual presentation of the rubber band tied around the arm during native treatment of bone fracture causing superficial skin necrosis, circumferential scar and discharging sinus. We propose this short communication as rubber band syndrome in the arm and suggest clinical suspicion in all native treated wounds, bone fractures and non allopathic treatments with circumferential scar and discharging sinus.

Conflicts of Interest Nil.

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