Industrial Cable Tie. A Low-Budget Alternative To Closure Of Large Wounds

Shankari S, BMH Mohd Shakir, VS Naveen, Mustaqim A

Department of Orthopaedic Surgery Hospital Tawau, Sabah, Malaysia.
Plastic and Reconstructive Surgery Unit, Hospital Queen Elizabeth, Sabah

INTRODUCTION
Wound closure techniques have evolved from the earliest development of suturing materials to comprise resources that include synthetic sutures, absorbables, staples, tapes and adhesive compounds.
Surgical wound closure directly apposes the tissue layers, which serves to minimize new tissue formation within the wound. However, remodeling of the wound does occur, and the tensile strength is achieved.
There are various method for wound closure
Industrial cable tie, invented by electrical engineers and are being used in our daily life.
We can see cable ties are used in the construction site, in the electrical cables, used to tie plastic bags when we purchase from the supermarket and even in the fashion industry.
In our setting, medically, we use Cable tie for wound closure.

CASE PRESENTATION
A 10 Idahan guy, involved in a motor vehicle accident and sustained open fracture midshaft of right radius ulna Gustilo 2. Wound debridement and external fixator of radius and k-wiring of the ulna was done. Wound over the volar aspect, Size : 10cm x 6cm

DISCUSSION
How did my idea of cable tie come about?
We are very familiar with the theory of introduced by Ilizarov, whereby he developed the law of tension-stress, which describes the process of new bone and soft tissue regeneration under the effect of slow and gradual distraction.
Similar to this principle, a serial stretching is required in our cable tie to allow wound approximation.

CONCLUSION
Cable tie for wound closure which is a low cost material, and easily available, which requires a small learning curve to perform.
And, most importanly this method gives good outcome.

REFERENCES