Cable-Tie Wound Dressing: An Innovative Solution To Large Wounds

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INTRODUCTION:
Most commercial wound closure systems mentioned in literatures incur high cost to patients. Hence, we adopted a simple and cost effective novel technique of cable tie wound dressing for large wounds.

MATERIALS & METHODS:
Disposable consumables needed are as follow: Dressing set, cable ties (1 USD for 50 small cable ties) and surgical stapler.
Surgical steps:
1. Assemble the cable tie strip by connecting a cable tie to another cable tie’s case forming a strip.
2. Clean the wound followed by stapling the cable tie strips perpendicular to the wound approximately 1.5cm apart.
3. The wound is dressed with vaseline gauzes and a non-compressive dressing or vacuum dressing.
4. Cable ties were tightened gradually 1-3 mm every 24 hours until wound closure achieved. Avoid over tensioning of skin.
5. Sufficient time is allowed for wound healing prior to removal of cable ties.

RESULTS:
Three patients who had abscesses over elbow, knee and thigh respectively were recruited for this study. Incision and drainage were performed and cable tie dressing were applied on second day postoperatively (Figure 1). All patients took an average of 5 days for complete wound approximation and another 10 days to achieve complete wound healing.

DISCUSSIONS:
A cable tie utilized for wound management is a surgical device comprising of an elongated flexible strip having an integrated gear rack and a ratchet within a small open case on its opposite end. Once the tip of the cable tie has been pulled past the ratchet, it tightens the loop in a unidirectional manner. It has superior strength as compared to vessel loops or monofilament sutures.

CONCLUSION:
We regard the use of cable ties as a low cost, easily available, effective and well-tolerated alternative wound closure technique.

REFERENCES: