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INSORB® Absorbable Subcuticular Skin Stapler

ADVANCEMENT IN CLOSURE OF THORACIC INCISIONS: EXPERIENCE WITH ABSORBABLE SKIN STAPLES

We have evaluated the use of an absorbable subcuticular skin stapler (INSORB® Subcuticular Skin Stapler, Incisive Surgical, Inc., Plymouth, MN) in our thoracic surgery practice. Our experience of more than 3 years involves the closure of over 300 posterolateral thoracotomy incisions *without a single wound infection*. (Similar experience is reported in the literature in various surgical incision sites.¹⁻⁴) Wound closures were observed immediately post-surgery and generally at a one-week follow-up visit. Our closures with the absorbable subcuticular stapler result in a secure, interrupted, everted skin closure. Postoperatively, the incisions show a notable lack of inflammation, while patients express less discomfort and anxiety than was associated with metal skin staples. We have seen very good cosmetic results - observed as thin flat scars without pigmentation or staple tracks. The speed of the subcuticular stapler is similar to that of metal skin staples, and faster than subcuticular suturing, thus reducing operating room times and adding the efficiency of a single operator technique. Wound closure with the absorbable staples result in reduced wound complications and low maintenance wounds. In addition, the use of the absorbable subcuticular skin stapler eliminates the cost, inconvenience, and patient anxiety and discomfort associated with the presence of metal staples and their eventual removal. Our experience suggests that wound closure with the absorbable subcuticular skin stapler provides comfortable, low maintenance wounds, a high degree of patient satisfaction and is a preferred alternative to metal skin staples and subcuticular suturing in thoracic surgery procedures.

SURGICAL CONSIDERATIONS

1.

Absorbable deep running suture is placed 1 cm from wound edge to take up tension and align the incision for accurate and easy staple placement.



2.

Single operator technique utilizes a double Adson forceps with closure times similar to metal staples.



3.

Staples are placed at about 7mm intervals and form a secure uniform approximation with pronounced eversion

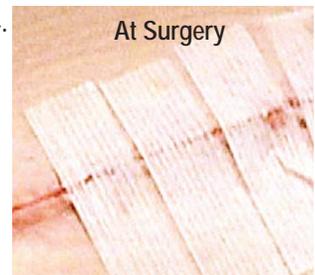


CLINICAL OUTCOMES

We prefer the application of Steri-strips for wound protection.

4.

At Surgery



This is a comfortable, low maintenance wound with sustained eversion and the absence of inflammation from the absorbable staples.

5.

At 9 Days



Wounds heal with flat, narrow scars and very pleasing aesthetic results.

6.

At 7 Weeks



Patient satisfaction has been excellent.

1. "Renal transplant incision closure using new absorbable subcuticular staple device", *Clinical Transplant*, May-June 2007

2. "Experience with a Novel Absorbable Subcuticular Skin Stapler in General Surgery", *Surgical Consultants, P.A.*, 2007

3. "A Revolutionary Advance in Skin Closure", *Journal of Long-Term Effects of Medical Implants*, January 2006

4. "Comparison of histologic tissue responses of incisions closed by use of absorbable subcuticular staples", *American Journal of Veterinary Research*, November 2005