Preparation makes perfect

Drape crimping: a novel technique for retracting skin flaps

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Elasticated retractors such as Lone star, or Robsons, have become established in various surgical sub-specialities [1-4]. The advantages over traditional techniques (e.g. sutures, fixed metal retractors) are that they are kept out of the surgical field and can be easily adjusted throughout the procedure. This prevents hampering of the surgeons movements, maintains tension on the surgical site, and is beneficial to wound healing through placing tension on the base, rather than apex, of the skin flap.

The problem

Elasticated retractors can

1. **Pull the drapes forward, loosening tension and obscuring the operative area.**
2. **Occasionally, bulky self retainers are used to attach the elastically retractors to, but these are both costly and increase the set up time for the operation [3,4]**

The technique below was devised by the senior author to solve this problem without these additional financial or operative time implications.

Figure 1 The set up for square draping with crimping

Technique

Disposable or non-disposable adhesive surgical drapes are crimped before being applied to the patient in either a square or other configuration. The skin incision is performed and the proximal hook of the elasticised retractors applied to the wound edges before artery clips are used to secure the elastically retractors (in parallel) to the drape crimps.

Discussion

The use of drape crimping spreads the retractile forces of the elastically retractors across a wide area and prevents the retractors re-locating towards the wound. This facilitates an optimal operating set up by reducing interference in the surgeons operating field and enabling the ergonomics of the surgeons hand to proceed unhindered.

Figure 2 After application of the Robson's and attachment to the drapes with artery clip

1. An alternative method of intraoperative skin retraction: the Walton fish hooks. N Rogers , ES Davies 1995, 33 (5)323
2. The fish hook retractor, P Arullendran , AK Robson, 2001, 115 (3) 212-13
3. Lonestar retractor for paediatric hand surgery, A Knox , AR Harrop, 2011 Volume: 128 (1) 36e-7e
4. Elastic stay hooks and self-retaining retractor technique for mastectomy skin flaps. Dominguez FJ, et al. 2007 141 (2) 272-4