A technique for improved skin isolation and a more visible operative field during penile prosthesis surgery

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BACKGROUND

The most feared (and potentially preventable) complication of penile implant surgery is infection, occurring in up to 5% of cases with 2.8% requiring surgical removal.¹ Most infections arise from contact with skin flora during surgery. Methods to avoid infection include perioperative antibiotics, antibiotic irrigation of the prosthesis, preparing the sterile site with chlorhexidine alcohol (rather than povidone-iodine) for over five minutes and non-touch techniques.²⁻⁴

TECHNIQUE

Having prepared the surgical field with four standard drapes, the perineal incision is retracted with a small Alexis® wound retractor (Applied Medical, Rancho Santa Margarita, CA, US). The internal

Figure 1 Setting up the Alexis® retractor

semirigid polymer ring is inserted into the wound (Fig 1) and the external ring is folded over itself until in contact with the perineum. A clear fenestrated drape (normally used for central line insertion) is then applied around the retractor (Fig 2).

DISCUSSION

The Alexis® retractor minimises the risk of translocation of skin bacteria as it removes any contact point between the skin and the incision. Our previous technique involved applying a standard blue drape above the retractor, which covered the penis after retractor placement to reduce bacterial translocation from the penile skin. The technique described here minimises the risk of infection from the skin and allows visualisation through the clear drape as well as easy manipulation of the penis during prosthesis insertion. The retractor can also be unfurled (Fig 1) and an antibiotic solution poured into the wound to bathe the surgical field.

References

1. Wilson SK, Delk JR. Inflatable penile implant infection: predisposing factors and treatment suggestions. *J Urol* 1995; **153**: 659–661.
2. Henry GD, Wilson SK, Delk JR *et al*. Penile prosthesis cultures during revision surgery: a multicenter study. *J Urol* 2004; **172**: 153–156.
3. Carson CC. Diagnosis, treatment and prevention of penile prosthesis infection. *Int J Impot Res* 2003; **15**: 139–146.
4. Selph JP, Carson CC. Penile prosthesis infection: approaches to prevention and treatment. *Urol Clin North Am* 2011; **38**: 227–235.