pressure to prevent turbulence and improve visualisation. The 20-gauge needle and sheath are commonly available and cost-effective compared with branded arthroscopic cannulae.

Reference

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'Bale hook' needle mount and suturing techniques

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BACKGROUND

In restricted surgical spaces the traditional supination and pronation suturing movements of the wrist may prove extremely difficult. We present two variations on needle holding techniques to facilitate suturing in otherwise awkward situations. These 'bale hook' (Fig 1) techniques are employed routinely by the authors during laparoscopic prostatectomy and can be readily transferred to other procedures.

TECHNIQUES

During an extraperitoneal laparoscopic radical prostatectomy, technique 1 is used to close paraumbilical anterior rectus sheath port site incisions. A 'J' shaped needle is grasped in the line of its long axis with its curvature in the same flat plane as the needle holder jaws and handle. The needle is 'dipped' into the incision, 'bale hooking' the anterior fascial layer (Fig 2). Using this technique, stay sutures are placed either side of the fascia facilitating intraoperative access and subsequent wound closure.

Technique 2 is also employed in laparoscopic radical prostatectomies during urethrovesical anastomoses in the awkward and restricted 12 o'clock position posteriorly. The rear of a 5/8 or 1/2 circle needle is grasped parallel to its long axis with the needle curve and tip perpendicular to the jaws and pointing towards the handle (Fig 3). By a simple straight line traction movement, the needle can be hooked through the posterior bladder wall and delivered ergonomically and atraumatically.

Figure 1 Bale hook or box hook; used for handling cargo

Figure 2 In-line mounting of the 'J' needle for closure of fascia in small laparoscopic incisions

Figure 3 Alternative needle mounting 'bale hooking' suture technique for laparoscopic urethrovesical anastomosis

DISCUSSION

These simple variations on traditional suturing techniques can be employed safely and readily during a wide variety of surgical procedures. They are effective and negate the use of more expensive suture closure devices.