

Although blood contamination of footwear has been highlighted in the article by White *et al.* they have not commented on the prolonged survival of hepatitis B and HIV in the environment, especially in dried blood. Recent work has shown that HIV can survive for several weeks in the presence of dried blood at room temperature (1). Hepatitis B has been shown to withstand drying for up to 6 months and still produce infection on inoculation in an animal model (Dr K Tsiquaye, Senior Lecturer in Virology, The London School of Hygiene and Tropical Medicine, personal communication).

We feel that blood contamination of footwear is a significant health hazard that needs highlighting. Our results suggest that manual cleaning is inadequate and footwear may be a potential source of infection to cleaners and surgical staff.

Inactivation of hepatitis B and HIV can be achieved by moist heat at a temperature of 90°C for 5 min (2,3). Washing machines and footwear designed to withstand regular cleaning at this temperature are available at a cost comparable to existing theatre footwear.

In the most recent data available, HIV infection was estimated to be present in approximately 23 400 individuals in the United Kingdom at the end of 1991 and is therefore a real cause for concern (4). Theatre shoes are contaminated with blood and this persists despite current cleaning practices. To date there are no reports of viral infection acquired from contaminated footwear; however, we believe that modified cleaning practices should be adopted to eliminate this potential hazard.

LOUIS J FLIGELSTONE FRCS

TINA E JERWOOD MB BCH

J ANDREW THOMAS FRCS

RICHARD W M REES FRCS

University Hospital of Wales
Cardiff

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Laparoscopic ligation of varicoceles: an anatomically superior operation

Al-Shareef *et al.* (*Annals*, September 1993, vol 75, p345) conclude that laparoscopic ligation of the internal spermatic vein is the operation of choice for the management of varicoceles, but they provide no real evidence for this.

They list a number of advantages for the laparoscopic technique but these are unconvincing:

- 1 It is minimally invasive—this is a debatable point and we would argue that entering the peritoneal cavity to do an

operation that can be done through a small incision retroperitoneally is perhaps more invasive.

- 2 Equally effective as the open procedure—no evidence is presented to justify this claim as no data is presented on the efficacy of the open procedure. The follow-up for the detection of recurrence is short.
- 3 Minimal requirement for analgesia.
- 4 Early ambulation.
- 5 Early discharge from hospital—we routinely perform this open procedure as a day case.

Marcain® infiltration to the wound edges, a Voltarol® suppository preoperatively and Voltarol 50 mg three times a day postoperatively eliminates the need for opiate analgesia. Patients are discharged within 6 h of their operation and return to work within days.

A small incision placed carefully in the skin creases gives a good cosmetic result.

We would suggest that their paper shows that laparoscopic ligation of varicoceles is possible, but does not show conclusively that it is the operation of choice.

A J P SANDISON
Surgical Registrar

PETER A JONES
Consultant Surgeon

Mid Kent Healthcare Trust,
Maidstone Hospital

In childhood early ligation of varicoceles is considered appropriate for the prevention of both ipsi- and contralateral testicular atrophy (1). Results of conventional surgery in this age group are, however, frequently disappointing with recurrence rates of 3.6-37.5% (2,3) depending on the method used. Embolisation in experienced hands is reported to give better results, but recurrence still affects approximately 10%. These poor results have prompted us to manage all children (<16 years) presenting with varicoceles by laparoscopic ligation. We have treated 11 children (mean age 10 years) with no recurrence at a mean follow-up of 8 months and with no significant morbidity. We therefore support Al-Shareef *et al.*'s view that a laparoscopic approach provides a superior approach to the varied venous drainage of the testis enabling easy access to retroperitoneal and pelvic vas associated veins which on venography are frequent sources of failed treatment (4). However, scrotal venous crossover has also been reported to be responsible for some cases of failed operative ligation and a laparoscopic approach will not remove this source of failure. Parents must be aware that although the results with a laparoscopic approach may be better than conventional surgery, experience is still in its infancy and, as no long-term follow-up is available, prolonged follow-up is required.

With regard to the technique used by Al-Shareef *et al.*, our experience in children who have not had previous intervention, identification and separation of the artery among a cord of venous structures is not always easy and is more difficult when recurrent cases are encountered with multiple vessels snaking around the artery; because of this our management has been to ligate both artery and veins. The precedent for this in the paediatric age group being the first stage of a Fowler-Stephens orchidopexy. As the testicular blood supply is then dependent on collateral flow around the vas, management of vas-associated venous collaterals must be by minimal dissection. No child who has had both vessels ligated has subsequently developed testicular atrophy. However, the risks of oligospermia after ligation