Correspondence

Perioperative and postoperative tranexamic acid reduces the local wound complication rate after surgery for breast cancer

Sir

We were interested to read the paper by Dr Oertli and colleagues (*Br J Surg* 1994; **81**: 856–9) on the reduction by tranexamic acid of drainage volumes after breast operations with axillary dissection. The authors' clinical conclusions are clear, but they do not address the mechanism of action of tranexamic acid.

Seromas usually contain an almost clear, salmon pink-coloured fluid that does not clot. As the authors state, if this fluid originates from blood, it is serum and not plasma and should therefore contain virtually no fibrinogen. Peripheral lymph fluid also does not clot and seems to contain only trace amounts of fibrinogen, as can be inferred from measurements in humans and animals[1,2].

We measured the concentration of many components of seroma, immediately after axillary dissection as well as 5 and 10 days later. Our preliminary results indicate that seroma is more likely to originate from arm lymph than from blood. Directly after operation, seroma already contains a mean(s.e.m.) fibrinogen level of 0·14(0·02) g l^{-1} ($n = 20$). On days 5 and 10 these values are reduced below the limit of detection. Plasma in the same patients contains a mean(s.e.m.) of 3·1(0·2) g l^{-1} fibrinogen.

If there is no fibrinogen in the axilla after axillary dissection, how is fibrin formed and how could tranexamic acid work?

Dr Oertli and colleagues do not provide data in their article as to whether there is any difference between wound drains and axillary drains regarding the influence of tranexamic acid on fluid production. Do they have any indication that wound drains might contain a more bloody substance, the volume of which could be reduced by tranexamic acid, whereas axillary drains contain seroma, the production of which is not altered? The fact that neither the number of seroma-producing axillary wounds nor the duration of seroma formation is influenced by tranexamic acid further obscures its mechanism of action in reducing postoperative drainage.

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Management of bile duct stones in the era of laparoscopic cholecystectomy

Sir

I was pleased to read the above review by Dr Perissat and colleagues (*Br J Surg* 1994; **81**: 799–810). We have waited long enough for laparoscopic exploration of the common bile duct (CBD), and particularly laparoscopic choledochotomy, to be recognized as a 'possible option' in the treatment of bile duct stones. Having resorted to this option in six patients (in two after failure of endoscopic treatment), I know that laparoscopic choledochotomy is a technically difficult procedure requiring considerable patience and skill, especially when it comes to suturing the duct around a T tube. However, this has to be considered when open exploration may be the only alternative. I do hope that the role of endoscopic retrograde cholangiopancreatography (ERCP) and endoscopic sphincterotomy (ES) will eventually be limited to selected and complicated cases of CBD stones. Routine ES could not be justified on the basis of efficacy, morbidity rate or cost[1,2]. There is also legitimate concern about the long-term effects of sphincterotomy in relatively young patients[3]. When laparoscopic choledochotomy is indicated (CBD diameter above 10 mm, young patient, to avoid open surgery, failed ES or no expertise in ERCP), is it not better to refer the patient to a surgeon capable of clearing the CBD laparoscopically rather than to an endoscopist who is going to damage the sphincter of Oddi?

It is true that many factors have to be considered when dealing with choledocholithiasis and that some options have clear indications that make them the treatment of choice. However, by reviewing the available literature and organizing further trials, biliary surgeons have to find the answers to important questions. Is there justification for routine use of ERCP as a screening test? Why do we need ERCP when a selective intraoperative cholangiogram will do? And, clear-cut indications aside, why should we subject patients to two therapeutic sessions instead of one?

A one-session approach to the problem of CBD stones is well worth considering and offers many advantages[3,4]. The debate now moves a step further to whether biliary drainage is necessary after laparoscopic choledochotomy[5,6].

To establish laparoscopic choledocholithotomy as a viable option, training has to aim at advancing laparoscopic skills and techniques must be refined.

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Efficacy of octreotide in the prevention of complications of elective pancreatic surgery

Sir

I read with interest the recent article by Dr Pederzoli and colleagues (*Br J Surg* 1994; **81**: 265–9) and would like to emphasize the following points.

I am surprised to find a large proportion (27·8 per cent) of left