

PostScript

LETTERS

If you have a burning desire to respond to a paper published in *EMJ*, why not make use of our "rapid response" option? Log on to our web site (www.emjonline.com), find the paper that interests you, and send your response via email by clicking on the "eLetters option in the box at the top right hand corner. Providing it isn't libellous or obscene, it will be posted within seven days. You can retrieve it by clicking on "Read eLetters" on our homepage. The editors will decide as before whether to also publish it in a futher print issue.

Fasciotomy in crush syndrome patients: debates continue

We read, with interest, the well written articles on fasciotomy and crush injury by Duman *et al*¹ and Demirkiran *et al*.² Demirkiran *et al* presented 18 cases of crush syndrome, seven of them underwent fasciotomy, and six of them had amputation in the end.² It is difficult for Demirkiran *et al*² to recommend fasciotomy as the first choice treatment in crush syndrome patients. By contrast, Duman *et al*¹ presented 16 cases of fasciotomy, 10 of them had no peripheral pulses, four underwent amputation, four needed further physiotherapy, and eight functionally recovered after 15 months. Huang *et al* also reported high infection and amputation rate from their fasciotomies series.³ During an earthquake disaster because of increased patient overload and the chaotic situation, fasciotomies carry a higher risk of infection and can result in improper wound care and sepsis and mortality. Sever *et al* reported findings that support the attitude not to undertake fasciotomy unless clear objective indications are present such as increased intracompartmental pressure.⁴ Sever *et al* also suggested that the practice they followed during this disaster regarding fasciotomy was not correct.⁴ However, this dispute regarding fasciotomy is still not settled, and there is a need for prospective studies on intracompartmental pressure in crush syndrome patients.³

Y-M Lin, T-S Lee

Department of Orthopaedics, Taichung Veterans General Hospital, Taichung, Taiwan; l4321@ms2.hinet.net

References

- Duman H, Kulahci Y, Sengezer M. Fasciotomy in crush injury resulting from prolonged pressure in an earthquake in Turkey. *Emerg Med J* 2003;20:251-2.
- Demirkiran O, Dikmen Y, Utku T, *et al*. Crush syndrome patients after the Marmara earthquake. *Emerg Med J* 2003;20:247-50.
- Huang KC, Lee TS, Lin YM, *et al*. Clinical features and outcome of crush syndrome caused by the Chi-Chi earthquake. *J Formos Med Assoc* 2002;101:249-56.
- Sever MS, Ereik E, Vanholder R, *et al*. Clinical findings in the renal victims of a catastrophic disaster: the Marmara earthquake. *Nephrol Dial Transplant* 2002;17:1942-9.

Ondansetron and chest pain

I was interested to read the letter by Dodd and Doyle¹ criticising routine paramedic use of cyclizine as an antiemetic for patients with chest pain. They sensibly highlight the *BNF* statement citing cyclizine's side effects of palpitations and arrhythmias as cause for concern but they then go on to recommend ondansetron as the antiemetic of choice for patients with chest pain based on its lack of "serious" side effects.

Several reports have implicated ondansetron in causing not just arrhythmias² but chest pain^{3,4} too. In fact, the *BNF* lists chest pain, arrhythmias, hypotension, and bradycardia under ondansetron's side effects, while the packaging insert for ondansetron (*Zofran*) lists "chest pain with or without ST depression" among associations with its use. Angina is not specifically mentioned on the UK insert (because of lack of proof of a cause-effect relation) but has been on the insert for the US product since 1992. Furthermore, clinical trials have shown ECG changes after intravenous administration of ondansetron and other 5-HT₃ receptor antagonists in healthy subjects.

The method by which 5-HT₃ receptor antagonists might precipitate myocardial ischaemia and arrhythmias is not clear. It has been postulated that it results from inhibition of the Bezold-Jarisch reflex by 5-HT₃ receptor block on vagal afferent fibres and a complex pattern of coronary vasoconstriction and vasodilatation mediated via various cardiac 5-HT receptors. Other authors have explained ECG changes on the basis of 5-HT₃ antagonists ability to block cardiac sodium channels and their affinity for the potassium channel, which may delay repolarisation.

Overall, ondansetron has a better side effect profile than many antiemetics but it is the side effect of chest pain, specifically, that may cloud the clinical picture the most. It would seem prudent to exercise caution when using ondansetron in the treatment of suspected acute coronary syndromes.

J Lee

Accident and Emergency Department, Leeds General Infirmary, Leeds LS1 3EX, UK; docjasonlee@hotmail.com

References

- Dodd T, Doyle T. Cyclizine. *Emerg Med J* 2003;20:302.
- Kasinath N, Malak O, Tetzlaff J. Atrial fibrillation after ondansetron for prevention of postoperative nausea and vomiting. *Can J Anaesth* 2003;50:215-20.
- Ballard H, Bottino G, Bottino J. Ondansetron and chest pain. *Lancet* 1992;340:1107.
- Bosek V, Hu P, Robinson L. Acute myocardial ischaemia after administration of ondansetron hydrochloride. *Anesthesiology* 2000;92:885-7.

Haemorrhage after pneumothorax aspiration

I read with interest the case reports on haemorrhage after aspiration for spontaneous pneumothorax.¹

It has always been my understanding that the reason for continuing to use the second intercostal space, mid-clavicular line (2ICS MCL) approach for these patients is more to

do with convenience and ease of approach than for any scientific reason. Aspiring two litres may take considerable time, and using the 2ICS MCL it is generally easy to find the intercostal space and the patient can be in pretty much any position that is comfortable for them and convenient for the "aspirator". I would contrast this with the 5th intercostal space anterior axillary line approach, when it can be more difficult to identify the space and awkward for both patient and doctor to keep the arm in a convenient position. I tried this approach for a while and admit to going back to the 2ICS MCL approach, which I find much easier. While tempting to blame the anatomy and dangerous "big vessels" on each of the cases presented, in none of them was a source of bleeding identified. It is therefore not possible to conclude, as the authors seem to, that similar complications would not occur if a different approach occurred.

I would also be interested to know what technique was used for aspiration—with modern purpose designed seldinger technique kits (or just an old fashioned single lumen cvp line kit) the needle used to puncture the chest wall is of a comparatively small calibre. It would be a rare occurrence to cause a massive haemothorax even when deliberately puncturing subclavian vessels for central venous access, so it does seem incredibly unlucky to have three cases in such a short period of time.

F C Rae

Accident and Emergency, Queen Alexandra Hospital, Portsmouth, UK; firae@hotmail.com

Reference

- Rawlins R, Brown KM, Carr CS, *et al*. Life threatening haemorrhage after anterior needle aspiration of pneumothoraces. A role for lateral needle aspiration in emergency decompression of spontaneous pneumothorax. *Emerg Med J* 2003;20:383-4.

Needle handling should be avoided while suturing

I read the instructive and informative article by Gandham and Menon. However, I was concerned to note that in figure 1 the suture needle appears to be held by the thumb and index finger of the operator. Needle handling has been linked to glove perforation that can be significantly reduced if the suture needle is held only with instruments.² This forms a key part of a non-touch suture technique as taught on the Basic Surgical Skills course.³ Do the authors feel that needle handling is a low risk practice?

R E McLaughlin

Emergency Department, Ulster Hospital, Belfast BT16 1RH, UK; remclaughlin@tinyworld.co.uk

References

- Gandham S, Menon D. Prospective randomised trial comparing traditional suture technique with the dynamic sliding loop suture technique in the closure of skin laceration. *Emerg Med J* 2003;20:33-6.
- McAdam T, McLaughlin R, McNicholl B. The influence of the BSS course on needlestick injuries. *Ann R Coll Surg Engl* 2002;84(suppl):310-11.
- The Royal College of Surgeons of England. *Basic surgical skills: participant handbook*. 1st ed. London: Royal College of Surgeons of England, 1996:12.