Fluid optimization guided by oesophageal Doppler significantly improves bowel perfusion

Editor—We report an emergency laparotomy in an elderly patient, where central venous pressure (CVP) did not provide a reliable guide to intraoperative fluid administration. However, oesophageal Doppler-guided fluid resuscitation sufficiently improved perfusion of the compromised gut to allow a definitive and curative operation to proceed, in circumstances where conservative management and a second operation would otherwise have been necessary.

An 82-yr-old lady presented with symptoms and signs of acute bowel obstruction. Examination revealed severe abdominal distension and an irreducible right femoral hernia. She was moderately hypotensive and anuric. Urea and creatinine levels were elevated, and there was a mild metabolic alkalosis. The lactate level was 4.8 mmol litre\(^{-1}\) and creatinine levels were elevated, and there was a mild hernia. She was moderately hypotensive and anuric. Urea

**Table 1** Comparison of intraoperative CVP and oesophageal Doppler recordings during volume resuscitation. Total volume given 4500 ml

<table>
<thead>
<tr>
<th>Time after induction of anaesthesia (min)</th>
<th>Fluid given cumulative total (ml)</th>
<th>Central venous pressure (mm Hg)</th>
<th>Oesophageal Doppler measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hartmann’s solution</td>
<td>Volulyte(^{*})</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>1000</td>
<td>500</td>
<td>14</td>
</tr>
<tr>
<td>75</td>
<td>1500</td>
<td>1000</td>
<td>8</td>
</tr>
<tr>
<td>90</td>
<td>2000</td>
<td>1500</td>
<td>15</td>
</tr>
<tr>
<td>105</td>
<td>2500</td>
<td>2000</td>
<td>20</td>
</tr>
</tbody>
</table>
and the bowel could have been permanently compromised. The surgical course of the operation, and hence the outlook for the patient, may be changed dramatically by oesophageal Doppler-guided fluid management.

**Conflict of interest**
None declared.

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**A survey of patients discharged to the community on modified-release strong opioids by a tertiary level Acute Pain Service**

Editor—Modified-release strong opioids are commonly prescribed for the management of acute pain in hospital patients. There are little data available on follow-up of such patients in the community. Most of the available literature focuses on aspects of long-term use of strong opioids in chronic pain conditions.1

To quantify this issue in our institution, we carried out a retrospective survey of our practice on this aspect of patient care. In our hospital, patients on modified-release strong opioids being discharged home are given a letter detailing medications and a request to the general practitioner to review the analgesia and reduce opioid dosage as appropriate. Verbal consent is sought from all patients to telephone them 6 weeks after discharge to assess progress. Results of the telephone follow-up are documented and retained by the Acute Pain Service (APS) and we have reviewed these data.

Local Ethics Committee Approval was sought but was judged to be not necessary for this anonymized review of our existing clinical practice. Over a period of more than 2.5 yr, 264 patients were discharged to the community on modified-release strong opioids. Of these, 48% were prescribed oxycodone-sustained release tablets, 8% with fentanyl patches, and 2% were discharged on oral hydromorphone. The telephone follow-up rate was 50% with an average time to follow-up of 63 days. Of the 131 patients successfully followed-up, 75% had discontinued the strong opioid. Thirty-three patients (25%) were still on the strong opioid. There was active participation from the patient’s general practitioner in the titration of the opioid medication in 70 patients (53%).

There are concerns about discharging patients with acute pain conditions into the community on strong opioids. These involve aspects of care such as dose titration, reviewing for possible side-effects, withdrawal effects from the opioids, and potential for misuse or addiction. Opioids are legally regulated medications and there is a need for strict accounting of prescriptions. This is particularly so in the context of acute pain management, since the medication requirements should reduce as the acute pain condition resolves. This leads us to the issue of whether it is safe to discharge patients into the community on modified-release strong opioids for acute pain. In our survey of 131 patients discharged from the APS, the majority of patients (75%) had successfully weaned off the opioid medication. While the results from those patients whom we contacted were encouraging, 50% of the patients were lost to follow-up. One of the major reasons for poor follow-up rate was an inability to contact patients by telephone. Despite this, we have had no letters or telephone calls from Primary Care to ask advice or express concerns over these prescriptions.

This survey has highlighted the difficulties of prescribing strong opioids for acute pain in patients who are discharged into the community and their continued follow-up. APSs across the UK have striven to improve analgesia for patients, but by doing so, there is the potential that we may create problems for our colleagues in Primary Care. Despite this, we should strive to follow-up these patients in a more robust manner through improved liaison with our Primary Care colleagues, patients, and their carers. The importance of careful documentation of a management plan in the patient’s case notes cannot be stressed enough.

**Conflict of interest**
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