Head injury transfers: arm of greatest delay

In patients with suspected head injuries, the immediate purpose of a specific diagnosis is to determine which patients need an emergency or urgent neurosurgical operation. The teaching is that within two hours of injury, essential diagnostic studies should be completed, as delay can be extremely costly for the patient. In view of this emergency CT scans should be obtained as soon as possible on seeing the scans before accepting the patient often resulting in taxi transfer of images.

The study raises some questions:

- Why see the scans images before sanctioning a transfer? Are there concerns relating to the radiologist’s interpretation of the scans?
- Should it be a matter of policy that all isolated severe head injuries (GCS <8) be taken directly to the neurosurgical centres?

In patients with suspected head injuries, the greatest delay lies in the disposal of the patient after CT. This was especially the case where the patient had sustained traumatic head injury. Closer scrutiny showed that when it was a traumatic injury, there was almost universal insistence in seeing the scans before accepting the patient, often resulting in taxi transfer of images. The study raises some questions:

- Why see the scans images before sanctioning a transfer? Are there concerns relating to the radiologist’s interpretation of the scans?
- Should it be a matter of policy that all isolated severe head injuries (GCS <8) be taken directly to the neurosurgical centres?

Patient data

We searched the database for details about patients who had a LMA inserted during their care. The individual case report forms for these patients were reviewed when available. In 70 patients LMA placement was attempted, 61 (87%) placements had been recorded as successful. LMA insertion was recorded as successful in 24 of 25 (96%) patients when a technician attempted placement and 37 of 45 (82%) patients when a paramedic attempted placement. Intubation had failed in 29 patients and in 26 (89%) of these a LMA was successfully used to manage the airway (table 1).

Table 1 Prehospital ventilation with the laryngeal mask airway

<table>
<thead>
<tr>
<th>Description</th>
<th>Number attempted placements</th>
<th>Number achieved successful ventilation</th>
<th>Success rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>70</td>
<td>61</td>
<td>87</td>
</tr>
<tr>
<td>After failed intubation 29</td>
<td>26</td>
<td>29</td>
<td>89</td>
</tr>
<tr>
<td>Paramedic attempts (total) 45</td>
<td>37</td>
<td>37</td>
<td>82</td>
</tr>
<tr>
<td>Technician attempts (total) 25</td>
<td>24</td>
<td>24</td>
<td>96</td>
</tr>
</tbody>
</table>

Contributors

KP, IT, JT, and MW conceived the idea for the study. MW, IT, and JT designed the questionnaire. KP and JT collected the data. KP wrote the paper. The paper was discussed, revised, and edited by KP, IT, JT and MW. MW is the guarantor of the paper.

K Pattinson
Department of Anaesthesia and Intensive Care Medicine, The University of Birmingham, Queen Elizabeth Hospital, Birmingham, UK

J Todd
Centre for Primary Health Care Studies, University of Warwick, Coventry, West Midlands, UK

J Thomas
Warwickshire Ambulance Service, Leamington Spa, Warwickshire, UK

M Wyse
Warwickshire Ambulance Service, Leamington Spa, Warwickshire and University Hospitals NHS Trust Coventry and Warwickshire, Coventry, West Midlands, UK

Correspondence to: Dr K Pattinson; kyletsp@postmaster.co.uk

doi: 10.1136/emj.2003.013532

www.emjonline.com

Reference

A 31 year old man attended our accident and emergency department complaining of shortness of breath and right chest pain on climbing the stairs at home shortly after acupuncture treatment to his longstanding painful right shoulder one hour earlier. The acupuncture included needle insertion to the right scapular region, one of the needles caused sharp pain on insertion. The patient had no significant medical history and he never smoked.

On examination, he was not in any distress and his vital signs were normal. Examination of the chest suggested reduced air entry in the right apex but was otherwise normal. An erect PA chest radiograph showed a 5% right apical pneumothorax. The patient was discharged home with pneumothorax advice and a one week follow up chest radiograph was arranged but the patient failed to attend as he was asymptomatic.

Acupuncture is among the most popular of all complementary or alternative therapies. It is an invasive therapy and it is not free from risks for the patient. The style of acupuncture differs between cultures. The Chinese style acupuncturists tend to insert needles deeply into the muscles, while the Japanese style entails insertion into the subcutaneous tissues. Recent systematic reviews of the adverse events associated with acupuncture concluded that minor adverse events may be considerable but serious events were rare. The most common adverse events were needle pain, tiredness, and bleeding. Faintness, syncope, and needle breakage were uncommon. In Japan it is not a rare practice to intentionally break and permanently retain needles with risk of needle migration and organ damage. Pneumothorax was rare, occurring only twice in nearly a quarter of a million treatments, it is estimated that a pneumothorax would be expected to occur once in every 41 years of full time practice. Cases of bilateral pneumothoraces including bilateral tension pneumothoraces have been reported. Other serious events such as spinal cord injury, hepatitis B, fatal bacteremia, delayed cardiac tamponade, haemothorax, and pseudoaneurysm seem to be uncommon in standard practice performed by adequately trained acupuncturists.

We feel that this case shows the potential serious adverse events associated with acupuncture and must be thought of in patients receiving such therapy.

K Saifeldeen, M Evans
Department of Accident and Emergency, Princess of Wales Hospital, Bridgend, South Wales, UK
Correspondence to: Dr K Saifeldeen; knsaifeldeen@btinternet.com
doi: 10.1136/emj.2003.006049

References

Acupuncture associated pneumothorax

A 31 year old man attended our accident and emergency department complaining of shortness of breath and right chest pain on climbing the stairs at home shortly after acupuncture treatment to his longstanding painful right shoulder one hour earlier. The pneumothorax was rare, occurring only twice in nearly a quarter of a million treatments, it is estimated that a pneumothorax would be expected to occur once in every 41 years of full time practice. Cases of bilateral pneumothoraces including bilateral tension pneumothoraces have been reported. Other serious events such as spinal cord injury, hepatitis B, fatal bacteremia, delayed cardiac tamponade, haemothorax, and pseudoaneurysm seem to be uncommon in standard practice performed by adequately trained acupuncturists.

We feel that this case shows the potential serious adverse events associated with acupuncture and must be thought of in patients receiving such therapy.

K Saifeldeen, M Evans
Department of Accident and Emergency, Princess of Wales Hospital, Bridgend, South Wales, UK
Correspondence to: Dr K Saifeldeen; knsaifeldeen@btinternet.com
doi: 10.1136/emj.2003.006049

References

Acupuncture associated pneumothorax

A 31 year old man attended our accident and emergency department complaining of shortness of breath and right chest pain on climbing the stairs at home shortly after acupuncture treatment to his longstanding painful right shoulder one hour earlier. The pneumothorax was rare, occurring only twice in nearly a quarter of a million treatments, it is estimated that a pneumothorax would be expected to occur once in every 41 years of full time practice. Cases of bilateral pneumothoraces including bilateral tension pneumothoraces have been reported. Other serious events such as spinal cord injury, hepatitis B, fatal bacteremia, delayed cardiac tamponade, haemothorax, and pseudoaneurysm seem to be uncommon in standard practice performed by adequately trained acupuncturists.

We feel that this case shows the potential serious adverse events associated with acupuncture and must be thought of in patients receiving such therapy.

K Saifeldeen, M Evans
Department of Accident and Emergency, Princess of Wales Hospital, Bridgend, South Wales, UK
Correspondence to: Dr K Saifeldeen; knsaifeldeen@btinternet.com
doi: 10.1136/emj.2003.006049

References

Acupuncture associated pneumothorax

A 31 year old man attended our accident and emergency department complaining of shortness of breath and right chest pain on climbing the stairs at home shortly after acupuncture treatment to his longstanding painful right shoulder one hour earlier. The pneumothorax was rare, occurring only twice in nearly a quarter of a million treatments, it is estimated that a pneumothorax would be expected to occur once in every 41 years of full time practice. Cases of bilateral pneumothoraces including bilateral tension pneumothoraces have been reported. Other serious events such as spinal cord injury, hepatitis B, fatal bacteremia, delayed cardiac tamponade, haemothorax, and pseudoaneurysm seem to be uncommon in standard practice performed by adequately trained acupuncturists.

We feel that this case shows the potential serious adverse events associated with acupuncture and must be thought of in patients receiving such therapy.

K Saifeldeen, M Evans
Department of Accident and Emergency, Princess of Wales Hospital, Bridgend, South Wales, UK
Correspondence to: Dr K Saifeldeen; knsaifeldeen@btinternet.com
doi: 10.1136/emj.2003.006049

References