ACID ASPIRATION SYNDROME

Sir,—I have just re-read the paper by Hester and Heath (1977) and realize that they have misquoted our work (Hutchinson and Newson, 1975). They state that mortality from pulmonary acid aspiration syndrome in all hospitals in Auckland between 1967 and 1969 was 1 in 11 000 of non-obstetric patients. In fact, 1 in 11 000 was the frequency of severe pulmonary acid aspiration syndrome in all operative cases during that 3-yr period, including obstetric patients. The mortality (which regrettably was not quoted in our paper) was 10% of the morbidity, or 1 in 110 000, before the use of magnesium trisilicate mixture.

In the 3-yr period 1970–72, when magnesium trisilicate was coming into routine use, the frequency of severe pulmonary acid aspiration syndrome in all operative cases (including obstetrics) was 1 in 40 000. The mortality was 1 in 120 000, which one must admit was not very different from the period before antacid therapy. It is interesting to note that none of our 13 patients with severe acid aspiration syndrome during the 6 years had received antacid before anaesthesia.

Currently we are analysing the frequency of Mendelson’s syndrome during the years 1973–78, and this should indicate if the routine administration of a magnesium trisilicate mixture before operation has been justified.

B. R. Hutchinson
Auckland, New Zealand

REFERENCES


Sir,—We hope that Drs Hutchinson and Newson will forgive us for our carelessness in substituting mortality for frequency. We apologize unreservedly.

It is interesting to note the apparent failure of magnesium trisilicate therapy to reduce significantly the mortality rate from acid aspiration.

We await the results from New Zealand with interest to see if they do indeed confirm that magnesium trisilicate, as well as being cheap and safe, is actually effective. It is possible that the anaesthetic mortality survey (Scott, 1978) to be undertaken under the auspices of the Association of Anaesthetists of Great Britain and Ireland may produce comparable information in Great Britain.

M. L. Heath
J. B. Hester
London

REFERENCES


ENDOTRACHEAL INTUBATION IN STILL’S DISEASE

Sir,—If the arthritic patient referred to by Dr Dennison (1978) had presented only for tracheal intubation, then he and his colleagues could be applauded for their perseverance. As the patient required hip surgery, they should have considered alternatives to endotracheal anaesthesia. Spinal or extradural anaesthesia provide good operating conditions for hip replacement and are usually possible even with advanced arthritis of the spine.

Local anaesthesia would have avoided the measures described, which carried the potential risk of endangering the larynx and subluxing the odontoid peg.

As Aesop might have said: “If at first you don’t succeed, discretion is the better part of valour.”

J. David Greaves
Queensland, Australia

REFERENCES


DIFFICULT INTUBATION

Sir,—In response to the correspondence by Dr Dennison (1978) on intubation of a patient with Still’s disease, I should like to describe a recent case of difficulty in endotracheal intubation at the University of Tübingen.

A young 24-year-old female patient suffering from generalized fibromatosis presented for extensive surgery of the upper and lower jaws combined with multiple dental extractions. All the muscles of the patient were of bone-like consistency and ankylosis of the temporo-mandibular joints did not allow separation of the teeth by as much as 1 mm. There was no movement of the cervical spine and the larynx was completely imobile.

Anaesthesia was induced with small quantities of etomidate which permitted good spontaneous ventilation. A soft latex armoured tube was well lubricated and passed through the nose and pharynx (which had been anaesthetized previously with local analgesic) until respiratory sounds were heard maximally through the tube. At this point, a lignocaine aerosol spray was passed through the tube and approximately 80 mg of lignocaine introduced, producing paralysis of the vocal cords within 2–3 min. This allowed subsequent easy blind nasal intubation in the anaesthetized patient breathing spontaneously. Insertion of the tube into the larynx was accomplished by rotation and advancement with the guide of breath sounds.

J. Hausdoerfer
Tübingen, West Germany

REFERENCES


Sir,—Thank you for the opportunity to reply to the letter of Dr Greaves. I do not agree that a technique of extradural or spinal analgesia could ever be as satisfactory or safe as general anaesthesia for hip replacement. Patients prefer general anaesthesia. Local anaesthetic techniques are not always successful, and they may be impossible to perform. Analgesia may not last the duration of surgery, “topping up” may be dangerous after blood loss, the inevitable hypotension is dangerous in the elderly, and anticoagulants are often present. In addition, intubation should always be available when the technique is used.

While aware of the possibility of subluxation of the odontoid peg in patients with rheumatoid arthritis, I have not seen this condition in many years, or heard of a case other than in patients suffering from trauma.

J. Hausdoerfer
Tübingen, West Germany

REFERENCES

At Miss C. W.'s first visit, difficulty in endotracheal intubation was not expected (my own error!). The decision to abandon the operation was, I am sure, correct. Apart from a sore throat, she was in excellent health and spirit after anaesthesia. On the second, third and fourth visits, endotracheal intubation was performed under local analgesia and basal sedation, with extreme care and gentleness; she remembered little of the second visit, and nothing of the third and fourth, to her chagrin, as she took an intense interest in the problem.

I agree entirely with Dr Greaves that retrograde cannulation of the larynx is potentially lethal; even a small haematoma between the cartilage and the mucosa of the trachea would be very dangerous in a patient in whom it is impossible to intubate the larynx quickly, and tracheotomy would be very difficult. I have been forced to use this procedure six times in my orthopaedic practice, and it was to avoid this specifically that the fibreoptic laryngoscope was obtained. It is not always successful, but it is a very useful piece of equipment.

While enjoying Aesop, I feel Dr Joad might have said: "It all depends what you mean by 'discretion'."

P. H. DENNISON
Birmingham

GLUCOSE TOLERANCE DURING SURGERY AND EXTRADURAL ANAESTHESIA

Sir,—In their report Houghton and colleagues (1978) stated that a normal glucose tolerance and insulin release were observed under extradural analgesia, and that general anaesthesia produced decreases in both glucose tolerance and insulin release.

There are, however, some objections relevant to these conclusions: First, the two groups studied are not comparable, since the mean control K-value is significantly ($P < 0.05$) smaller in the extradural group, which, therefore, may represent another population. This is supported further by the fact that these patients also had the greatest fasting insulin values (Table II in their article).

Second, although the glucose data in the general anaesthesia group show a decreased glucose tolerance ($P < 0.001$), the few insulin values neither permit nor indicate a statistically significant decrease in the release of insulin.

Therefore, further studies are needed before any conclusions on the effect of extradural anaesthesia on glucose tolerance and insulin release during or following surgery can be made.

Henrik Kehlet
Mogens R. Brandt
Holstebro, Denmark

REFERENCE

SIR,—Thank you for the opportunity of replying to Drs Kehlet and Brandt.

Although I agree that the two groups are not matched perfectly as regards their control K-values, this does not preclude a comparison of the K-value differences (control—operative (general) v. control—operative (extradural)). Within-patient comparison is the key to our method. Merely to amass operative plasma glucose and insulin data would appear to be of more limited value.

Certainly the few insulin values do not allow formal statistical analysis, but again within-patient comparison renders them more meaningful, if not "significant".

A. HOUGHTON
Dundee

SPREAD OF SOLUTIONS IN THE EXTRADURAL SPACE

Sir,—We were most interested in the statistical study by Grundy and others (1978), since their findings concerning the spread of solutions in the extradural space, based on resultant levels of analgesia, correspond closely with our results based on radiological studies (Burn, Guyer and Langdon, 1973). In particular, the relation of the spread of analgesia to the volume injected shows wide variations and cannot be predicted accurately; there is only a poor correlation between the height of the patient and the degree of spread. In addition the rate of injection is not significant, a conclusion reached also by Nishimura, Ketahara and Kusakabe (1959) using radioisotope tracers. We agree that the influence of age on the degree of spread is minimal; indeed in our series there was no correlation. In agreement with Nishimura also, we could not show any influence of gravity on the spread of the solution, and it is interesting that Grundy and colleagues found asymmetrical levels of analgesia in less than 14% of patients and even these could be accounted for by causes other than gravity, for example, the cannula tip deviated from the midline, or the presence of septa.

An investigation of the levels of analgesia and the spread of radio-opaque solution in the same patients would be of considerable interest.

JAMES M. B. BURN
L. LANGDON
Southampton

REFERENCES
