Adequate analgesia for acute pain

Controversy surrounds the appropriate use of analgesia for patients with acute abdominal pain of uncertain aetiology.¹ We investigated the extent to which severe abdominal pain, with no contraindication to analgesia, goes untreated in a receiving surgical unit.

Patients, methods, and results

Over one month 103 patients with acute abdominal pain were admitted to the Western Infirmary. Criteria for entry to the study were: (1) no contraindication to the use of potent analgesia or antacid treatment (which might mask important clinical signs); (2) a pain score ≥ 6 on a visual analogue scale ranging from 0 to 10²; and (3) no medical contraindication to the use of potent analgesia. Fifty one patients were included in the study and followed up prospectively during their first 24 hours in hospital. Provisional diagnosis, time of initial examination, and pain score two hours after the initial examination were recorded. In patients who underwent operation the interval between the decision to operate and the time of operation was also recorded. Four surgical teams managed patients during the study period and were unaware that the study was being conducted. All recordings were made by a single observer and results expressed as mean (SD).

The 51 patients (31 women, 20 men; mean age 48 (24.6) years) had a variety of conditions causing their pain (table). Twenty seven (eight treated by operation, 19 treated conservatively; six men, 21 women) received no analgesia in the first 24 hours of their stay in hospital while 24 did (six treated by operation, 18 treated conservatively; 14 men, 10 women). The mean pain scores of the two groups were 8.8 (1.2) and 8.1 (1.4) respectively and the mean ages 40.7 (22.2) and 55.3 (27.4)

Diagnoses, pain scores, and use of analgesia in 51 patients who fulfilled the criteria for study

Case No	Diagnosis	Pain score*	Analgesia†
Operative management			
1	Pancreatic pseudocyst	10	Yes
2	Appendicitis	10	No
3	Appendicitis	10	No
4	Intestinal obstruction	8	No
5	Appendicitis	9	No
6	Appendicitis	8	Yes
7	Appendicitis	10	Yes
8	Perforated ulcer	8	Yes
9	Appendicitis	8	No
10	Perforated ulcer	10	Yes
11	Testicular torsion	8	Yes
12	Gall stone ileus	8	No
13	Brachial embolus	6	No
14	Appendicitis	10	No
Conservative management			
15	Intestinal obstruction	6	No
16	Pericarditis	8	No
17	Salpingitis	6	No
18	Cholecystitis	10	Yes
19	Intestinal obstruction	10	Yes
20	Gastroenteritis	10	No
21	Peptic ulcer	9	Yes
22	Oesophagitis	10	Yes
23	Renal colic	10	No
24	Urinary tract infection	8	No
25	Menstrual pain	8	No
26	Salpingitis	8	No
27	Gastroenteritis	7	No
28	? Perforation, ? cholecystitis	10	Yes
29	Intestinal obstruction	10	No
30	? Cholecystitis, ? diverticulitis	8	No
31	Cholecystitis	10	Yes
32	Ovarian carcinoma	8	Yes
33	Peptic ulcer	9	No
34	Renal colic	7	Yes
35	Renal colic	8	Yes
36	Chest infection	8	No
37	Peripheral vascular disease	8	Yes
38	Intestinal obstruction	9	Yes
39	Urinary tract infection	6	No
40	Disseminated carcinoid	7	No
41	Pancreatitis	10	Yes
42	Diverticular disease	6	No
43	Crohn's disease	6	Yes
44	Pancreatitis	10	Yes
45	Renal colic	10	Yes
46	Intestinal obstruction	10	No
47	Urinary tract infection	8	Yes
48	Fractured ribs	7	Yes
49	Cholecystitis	10	Yes
50	Cholecystitis	8	No
51	Chest infection	7	No

*Maximum score 10.
†Use of analgesia preoperatively in those managed by operation and in first 24 hours in those managed conservatively.

years respectively. Fifty two patients were excluded because of inadequate pain scores (38), contraindications to analgesia (six), or difficulty in obtaining their history (eight).

Of the 14 patients who required surgery (table), six received preoperative analgesia and eight did not. Mean pain scores were 9.0 (1.0) and 8.6 (1.3) respectively. All patients received sedation immediately before operation. The mean preoperative waiting time was 70.0 (22.2) and 137.0 (50.4) minutes in the treated and non-treated groups respectively.

Thirty seven patients with no contraindication to analgesia were treated conservatively without surgery. Eighteen patients received analgesia and 19 did not. Mean pain scores were 8.8 (1.3) and 8.0 (1.4) respectively, and the mean time to receive analgesia was 41.3 (29.7) minutes after examination by the attending physician.

Comment

This study shows that acute abdominal pain with no contraindication to analgesia is often untreated in hospital. This may be due to reluctance to prescribe analgesia for patients with abdominal conditions or simply neglect to treat this symptom. The underuse of analgesia cannot be attributed to the relative inexperience of junior staff as all patients were seen by the consultant in charge. Many patients experienced considerable delay before undergoing operation (mean 137 (50.4) minutes) and did not receive preoperative analgesia despite receiving sedative premedication.

Patients with abdominal pain awaiting surgery should receive analgesia as it can no longer be said to mask clinical signs. The policy of withholding analgesia was formulated many years ago when large quantities of morphine (15-30 mg) were used.³ Nowadays 10 mg morphine provides satisfactory analgesia for four to six hours with minimal side effects in 70% of adult patients with moderate to severe pain, and it is unlikely to alter clinical signs.⁴ This, along with the availability of specific opiate antagonists and the ability to review patients regularly, supports the policy of giving analgesia to patients with severe undiagnosed abdominal pain. There is interest in the use of on demand self administered analgesia postoperatively.⁵ This intravenous method of treatment has proved reliable and cheap, and its use preoperatively and in patients with a positive diagnosis would be worth investigating.

We thank the patients and staff of the acute surgical receiving unit at the Western Infirmary, Glasgow, for their participation and help with this study.

- 1 Hughes TJ. Opiates in acute abdominal pain. *Br Med J* 1975;iii:1145.
- 2 Rosen M. Assessment of patients with pain. In: Marcus AW, Smith R, Whittle B, eds. *Pain: new perspectives in measurement and management*. New York: Churchill Livingstone, 1977:5-12.
- 3 Cope J. *Cope's early diagnosis of the acute abdomen*. 16th ed. Oxford: Oxford University Press, 1983.
- 4 Goodman LS, Gilman A. *Goodman and Gilman's pharmacological basis of therapeutics*. London: Macmillan, 1979:251.
- 5 Church JJ. Continuous narcotic infusions for the relief of postoperative pain. *Br Med J* 1979;ii:977-9.

(Accepted 10 December 1985)

Western Infirmary, Glasgow G11 6NT

PATRICK T ROUGHNEEN, MB, CHB, senior house officer in surgical specialties
HENRY J BURNS, FRCS, lecturer in surgery

University of Texas Medical School, Houston, Texas 77030, USA

BRIAN J ROWLANDS, MD, FRCS, associate professor, department of surgery

Correspondence to: Dr P T Roughneen, Department of Surgery, University of Texas Medical School, Houston, Texas 77030, USA.

Cephalgia fugax: a momentary headache

We describe a common benign headache that can be diagnosed on the basis of history alone and about which little has been written. A suitable name for the headache would help teaching and diagnosis. Over the years we have moved from calling it momentary headache to cephalgia fugax and believe that this is preferable to the term "ice pick pain" used by Raskin and Schwartz.¹ The pain is reminiscent of proctalgia fugax.

Patients, methods and results

Momentary headache or cephalgia fugax was recorded 40 times during 11 years from 1972 in one outpatient diagnostic index, and probably an equal number of unregistered cases were seen. Follow up was by postal questionnaire and when

necessary was supplemented by a letter to the general practitioner and a telephone call or home visit to the patient.

Thirty two patients presented with cephalgia fugax and three with migraine. The mean age of the patients was 28 (range 14–56), and 24 were women. The headaches were bilateral in 22 cases and occurred in the temporoparietal area in 30 and anywhere in the head in eight. The most consistent feature of the pain was its character, which was sharp, stabbing, darting, or shooting in all cases. Another characteristic was the brief duration of the pain: 24 patients said that it lasted from a split second to a few seconds, and 30 that it lasted for less than a minute; it never lasted for longer than five minutes. The frequency of the headaches ranged from five times a day to once a week, and 28 patients had had them for longer than four or five years. Migraine and tension headaches occurred in nine and five cases respectively. Trigger events were uncommon (three patients). None of the patients had neurological signs, and there were no gastrointestinal symptoms, although a few patients reported vague lightness in the head and shimmering in the eyes during the attack. Eleven patients had a relative or close friend who had had a cerebral tumour, stroke, epilepsy, or meningitis, and this may have contributed to their seeking advice.

Investigations were conducted in only six patients; two computed tomograms, two isotope scans, an electroencephalogram, and a skull x ray film were normal.

Follow up (mean duration 4.5 years, range 0.5–13.0 years) was successful in 37 patients and none developed a disorder related to headache. Twenty six patients still had the symptoms intermittently; in 10 they remitted within a year.

Comment

No explanation is offered for this symptom. Pearce referred to it in a paper devoted mainly to unnamed symptoms, including the "needle in the eye syndrome," of which we have no experience but which we would regard as part of the range of cephalgia fugax.² He also described the "exploding head" and a brief chest pain that we call "pectoralgia fugax." Drummond and Lance found that pain like a blow from an ice pick occurred in 39% and "ice cream headache" in 37% of a series of patients with migraine.³ The mechanism of ice cream headache, which develops quickly after ingestion of a cold substance, is not known. Drummond and Lance speculated that in patients with migraine pain pathways may be hyperexcitable, leading to more frequent occurrence of brief head pains and ice cream headache.³

We suggest that the term cephalgia fugax is better than ice pick headache and think that this symptom should be generally recognised so that patients can be reassured without undergoing needless investigation. A patient who has cephalgia fugax might have an unrelated cerebral tumour, but other headaches and manifestations of focal neurological disease would probably indicate this.

1 Raskin NH, Schwartz RK. Ice-pick like pain. *Neurology* 1980;30:203-5.

2 Pearce JMS. What's in a name. *World Medicine* 1979;14:77-8.

3 Drummond PD, Lance JW. Neurovascular disturbances in headache patients. *Clin Exp Neurol* 1984;20:93-9.

(Accepted 14 January 1986)

Department of Neurology, Adelaide Hospital, Dublin 8

LUKE O'DONNELL, MRCP, registrar

Department of Neurology, St Vincent's Hospital, Dublin

EDWARD A MARTIN, MD, FRCP, consultant neurologist

Correspondence to: Dr Martin, 1 Waterloo Road, Dublin 4.

Missing denture as a cause of recurrent laryngeal nerve palsy

We report an unusual case of recurrent laryngeal nerve palsy caused by prolonged retention of an oesophageal foreign body.

Case report

A 46 year old man presented with a history of hoarseness and mild dysphagia. Eighteen months previously he had been admitted to hospital with minor concussion and bruising to the head and neck after an assault while intoxicated. He had complained of moderate dysphagia for five days, ascribed to bruising of the larynx; neck x ray pictures looked normal. Hoarseness had developed some two months later and after some early improvement had remained constant. The dysphagia had returned over the past six months.

Examination found his voice weak and dysphonic. He had tenderness in the neck at the cricoid level, especially on eliciting crepitus, and a left vocal cord

palsy. A barium swallow examination showed pronounced widening of the postcricoid soft tissue shadow, reported as a probable neoplasm (figure). At rigid endoscopy a jagged piece of denture plate 3×3 cm was found impacted in a mass

Lateral contrast film of pharynx showing widening of postcricoid soft tissue shadow. (In retrospect plate may be seen lying against anterior wall of cervical oesophagus (arrowed).)

of scarred mucosa in the cervical oesophagus and removed. Postoperatively his dysphagia settled quickly, though the palsy and hoarseness remained. The patient later remembered that he had lost part of his denture at the time of the assault.

Comment

Loss of movement of one vocal fold is seen relatively often by otolaryngologists. The most common causes are malignant disease (25%), surgical trauma (20%), idiopathic (13%), inflammatory (13%), non-surgical trauma (11%), and neurological (7%).¹ No recorded case due to a retained foreign body could be found. The immobility in our patient was not due to cicatricial fixation of the hemilarynx after an unrecognised laryngeal fracture as it was passively mobile at endoscopy. The delayed onset of hoarseness suggests that it was due to impairment of the recurrent laryngeal nerve in periesophageal fibrosis.

Prolonged retention of a foreign body in the oesophagus is extremely unusual, though there is one recorded case of a wooden button retained for 17 years.² Broken or partial dentures may occasionally be swallowed, often while the patient is asleep or drunk.³

Unfortunately, radiology cannot be relied on to detect the presence of denture material as this is often radiolucent.⁴ Endoscopy is indicated for persistent symptoms even with negative radiological findings, as once impacted the chance of spontaneous passage is small.⁵

1 Maran AGD. Vocal cord paralysis. In: Maran AGD, Stell PM, eds. *Clinical otolaryngology*. Oxford: Blackwell, 1979.

2 Jackson C, Jackson CL. *Bronchoesophagology*. Philadelphia: Saunders, 1950.

3 McNab Jones RF. Pathology and treatment of diseases of the oesophagus. In: Ballantyne J, Groves J, eds. *Scott Brown's diseases of the ear, nose and throat*. 4th ed. Vol 4. *The pharynx and larynx*. London: Butterworths, 1979.

4 Saunbury P. Radio-opaque denture resins. *Dental Practitioner and Dental Record* 1964;14:243-4.

5 Nandi P, Ong GB. Foreign bodies in the oesophagus: review of 2394 cases. *Br J Surg* 1978;65:5-9.

(Accepted 23 December 1985)

Department of Otolaryngology, The Royal Infirmary, Edinburgh EH3 9YW

N P VON HAAKE, MA, FRCS, senior registrar

JANET A WILSON, FRCS, lecturer

Correspondence to: Mr von Haake.