should still adjust the dosage in terms of the current British corrected ratio. If such drugs are started or stopped during the interval, they might indeed affect the prothrombin level, and ad hoc arrangements might have to be made, as they easily can be, to readjust the dosage and the date of the next visit, and to amend the file. We think that the best way to avoid unfavourable drug interaction is to remind patients and their general practitioners of its possibility from time to time.

Conversion for use elsewhere—Should others wish to use this system it would require slight modification. Adaptation to Thrombotest would present no difficulty. For the programs to be available to a wider range of microcomputers it would be necessary for them to be rewritten to run under one of the standard disc operating systems, and adjustment to different printers would require attention. We think that this system

would be helpful to many hospitals and improve the standard of anticoagulant maintenance.

We thank Mr D R John and Mr J Cox for allowing us to use the microcomputer belonging to their department.

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Lesson of the Week

"I have a bone stuck in my throat"

N KIRKHAM, RUTH ENGLISH

When a foreign body such as a fish bone or a chicken bone is accidentally swallowed it may stick in the hypopharynx or cervical oesophagus. Food bones are often poorly calcified and may be very difficult to see on lateral radiographs of the neck. We describe two patients who died of septic complications when bones lodged in their throats and were not removed.

Case reports

Case 1—A 65 year old woman swallowed a fish bone, which lodged in her throat. She attended the accident and emergency department on the next day, where a lateral radiograph of the neck failed to show a foreign body. The patient's history of psychiatric illness was noted and she was sent home without any further examination. She returned three days later when the bone was found lodged transversely across the hypopharynx. It was removed but shortly afterwards she developed a cardiac arrhythmia and collapsed. After an initial recovery she collapsed again and died five days after removal of the bone. At necropsy the principal findings were oedema of the hypopharynx and cervical oesophagus, perforation of the oesophagus, and suppuration in the surrounding tissues.

Case 2—A 25 year old woman, who had suffered from cerebral palsy since birth, was brought to the accident and emergency department. While being fed her liquidised meal from a spoon, a bone had been missed. This had then lodged in her throat, causing considerable distress. The unfortunate combination of spasticity and distress made indirect laryngoscopy impossible without a general anaesthetic. This was thought to be inadvisable because of the danger of asphyxiation during induction. A lateral radiograph did not appear to show a foreign

Any patient claiming to have swallowed a bone and to have it stuck in his throat should be believed. The bone will probably not show in a lateral radiograph of the neck. The bone must be looked for and removed: otherwise the patient may die of septic complications

body. Clinically the patient was thought not to have a foreign body in her throat. Two days later she died. At necropsy a piece of bone 3 cm long was found lodged in the left piriform fossa, with oedema and inflammation of the surrounding mucosa and an associated aspiration pneumonia. The bone was very poorly calcified and only weakly radio-opaque at the exposures routinely used for soft tissue radiography. Review of the original neck radiograph showed that the difficulties of positioning the cassette had resulted in a film which showed the neck only down to the second cervical vertebra. The top of the bone was just visible at the edge of the film.

Discussion

Food bones show a variable degree of radio-opacity. Chicken bones are hollow with a wide medullary cavity and thin cortex, mimicking the appearance of human phalanges.¹ Bachmann has shown that fish bones show appreciable variation between different species. Trout and mackerel have poorly calcified bones, while salmon bones are more opaque. Cooking does not alter the degree of opacity. We have confirmed these findings in a small study in which we took x ray films of uncooked and cooked fish and meat bones in situ in a cadaver and also in a tissue equivalent phantom neck. All but the smallest and thinnest of bones were visible.

The best results from radiological examination are obtained with carefully positioned and exposed films, when a high degree of diagnostic accuracy is possible. About 75% of bones should

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To show trapped foreign bodies in the throat the lateral cervical radiograph must include the area in the box and extend down to the fifth cervical vertebra.

be visible at soft tissue exposures.² The diagnosis is more likely to be made if a radiologist reviews the films and is told the suspected position of a foreign body.³ Soft tissue swelling and gas in the soft tissues should be looked for and if necessary barium studies performed. The best way of detecting the bone is indirect laryngoscopy, which allows the likely sites in the hypopharynx, larynx, and upper oesophagus to be seen.⁴

As our cases show, the diagnosis may be missed if the appropriate x ray films are not taken. The area to be examined should extend down to include at least the fifth and preferably all of the cervical vertebrae (figure). Problems arise when the patient cannot be positioned properly. Interpretation of the radiographs is hampered in the presence of calcified hyoid and laryngeal cartilages. Rapid removal of bones from the throat is of paramount importance, given that the cervical oesophagus is the part of the gastrointestinal tract most likely to be perforated by a foreign body.⁵ Above all, the patient must be believed until a full examination by accurately positioned and exposed radiology and indirect laryngoscopy have conclusively excluded the presence of a foreign body.

We thank HM Coroner for Southampton and Devon for the permission to include details of the two cases; Mr T Gregory and Mr R Palmer, who took the radiographs of the specimen and cadaver; Mrs V Marshall for typing the manuscript; and Dr F J Brunton for his advice.

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A patient has been having severe attacks of pain that start retrosternally and progress along the gastrointestinal tract beginning about seven hours after a meal in a Western style restaurant. Nausea, vomiting, and diarrhoea occasionally occur. Synthetic cream is suspected as a cause but could this be the "Chinese restaurant syndrome" due to monosodium glutamate or some chemical additive?

Symptoms of the "Chinese restaurant syndrome" are predominantly vascular rather than gastrointestinal. I am not acquainted with a syndrome of pain beginning retrosternally (presumably oesophageal) and "progressing" along the rest of the gut; one would be interested to know the rate of progress and the character of the pain. An interval of seven hours is rather long for a direct toxic effect, as absorption of a meal would be complete long before that, though symptoms of food intolerance may be delayed in their appearance. Common things being commonest, however, I would ensure that the patient does not have gall stones; biliary colic is the most frequent cause of severe abdominal pain, waking the patient several hours after a large rich meal, and its distribution may be atypical.—JOHN BENNETT, consultant physician, Kingston upon Hull.

Should patients who say that they have "sickle cells" be prescribed the contraceptive pill?

When patients say they have "sickle cells," they may have homozygous sickle cell disease (haemoglobin SS) or one of the combined sickle cell haemoglobinopathies such as haemoglobin SC disease or sickle cell-thalassaemia. On the other hand, they may be symptom free carriers of haemoglobin S with sickle cell trait. Occasionally, patients even think that they have sickle cells when there is nothing abnormal in the blood at all. Sickle cell disease is an illness; sickle cell trait is not. Sickle cell trait is about 40 times more common than the disease. Although the commonest group of sicklers are those whose forbears came from west Africa, the gene is found throughout Africa, the Mediterranean, the middle east, and parts of India. There is an increased risk of thrombosis with the combined contraceptive pill as well as an increased risk of thrombosis in sickle cell disease, but it is by no means certain that the two risks are additive. Some manufacturers of contraceptive pills specifically warn against their use in sickle cell disease; but Freie sees no reason why a low dose combined

pill should not be prescribed.¹ Steroids have a favourable effect on sickling. In Jamaica medroxy progesterone (Depo-Provera) led to a statistically significant reduction of sickling attacks and improvement of blood counts.² Trials of the combined pill in sickle cell disease are being planned but until the reports appear it seems preferable to prescribe a progestogen only pill. For sickle cell trait there is no risk of thrombosis and no contraindication to a combined pill. Unfortunately, such women have been denied the pill in the mistaken belief that what may be bad for sickle cell disease may also be bad for sickle cell trait. For contraception this is emphatically not the case. Women with sickle cell trait should be prescribed the pill like anyone else.—D I K EVANS, consultant haematologist, Sickle Cell Centre, Manchester.

¹ Freie HMP. Sickle cell diseases and hormonal contraception. *Acta Obstet Gynaecol Scand* 1983; **62**:211-7.

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What is the empty epididymal syndrome, what causes it, and how is it to be treated?

The epididymis normally contains sperm conveyed through the efferent ducts from the rete testis to the tortuous convoluted epididymal duct. It is not possible, however, with the naked eye to tell whether the exposed epididymis contains sperm or whether it is empty. In an azoospermic man an empty epididymis implies either obstruction at the rete or efferent duct or an absent or deficient germinal epithelium within the testicle. The latter condition may usually be suspected by the presence of small soft testes and a considerably raised serum follicle stimulating hormone concentration. If this is the case scrotal exploration is usually unnecessary to make a diagnosis. Nevertheless, various stages of maturation arrest or intratesticular obstruction resulting in azoospermia do occur with palpably normal testes, and exploration will show an undistended epididymis. When an obstruction exists in the epididymis itself, usually in the body or tail, then the head or caput epididymis is visibly distended to the naked eye, exhibiting a worm cast appearance. Side to side vasoepididymostomy can relieve such an obstruction. The much less common condition of intramuscular obstruction with an associated empty epididymis cannot be treated surgically.—J C GINGELL, consultant urologist and lecturer in urology, Bristol.