

Phobics and ritualisers who are depressed

Quite a few phobias and rituals start during a period of depression and remain after the depression clears. Other pre-existing phobias and rituals worsen during a depressive episode. Such patients can benefit from antidepressants given over several months. Although some believe that certain compounds have special value, this is based on impressions from within group effects not from reliable controlled between group results (reviewed by Marks, chapter 16¹). Which particular tricyclic or monoamine oxidase inhibitor is used is not especially important, but the dose must be sufficient. Provided the patient is not mentally retarded, it is important that the antidepressants are used as an addition to exposure, not as a substitute for it.^{1,9-11}

Role of relatives

Many phobics and ritualisers suffer their severe handicap in silence, too ashamed to admit their problem even to close relatives. Others who confess their problem meet with incredulity and lack of sympathy or understanding. "Pull yourself together" is a common response. A cynic might argue that behavioural psychotherapy is precisely that—an exercise in willpower. But it shows the patient how to do it systematically in manageable bits. The general practitioner can help the phobic by explaining the nature of the problem and its remedy to a close relative and perhaps recruit that relative as a cotherapist to support the hard work needed to complete an exposure programme successfully.

What instruction does the doctor need?

Some doctors can prescribe and monitor exposure treatment after reading instruction manuals written for patients.^{5,6} Others want additional tuition. A brief course with specific clinical teaching under regular supervision is run by IMM for doctors at the Institute of Psychiatry.

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Lesson of the Week

Pneumothorax in the supine patient

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Chest radiographs of critically ill patients are often taken with the patient supine. Such radiographs are not ideal for the diagnosis of a pneumothorax, which may also escape clinical detection, at the very time that it is likely to matter most to the patient. The radiological signs of a pneumothorax in a supine patient are largely reported in radiological publications and are less well known to clinicians, who are usually the first to see the radiograph.

We describe three cases in which recognition of these signs by a clinician was or might have been crucial in determining the outcome for the patient.

Pneumothorax may be almost impossible to detect in supine radiographs and be manifested only by certain subtle signs; clinicians concerned with the critically ill should ensure that they can recognise these signs

Case histories

Case 1—A 71 year old man was admitted having fallen from a second floor window. He had sustained injuries to the head, left wrist, and chest with fractures of the third to ninth ribs on the right side, the third and fourth ribs on the left, and the left clavicle. Minor surgical emphysema was present but initially there was no evidence of a pneumothorax. He was given assisted ventilation. Five days after admission he developed a right pneumothorax. A chest drain was inserted and removed four days later. On the 12th day his condition deteriorated; the pulse rate rose slightly and the blood pressure fell to 90/60 mm Hg. Chest expansion appeared unequal with reduced movement, hyperresonance, and decreased breath sounds on the left. A left pneumothorax was suspected, but the signs in the supine radiograph (figure) were not recognised. The patient became hypoxic and the clinical signs persisted. Six hours later a repeat supine chest radiograph showed an obvious left pneumothorax with complete collapse of the left lung. A chest drain was inserted and the patient's condition rapidly improved.

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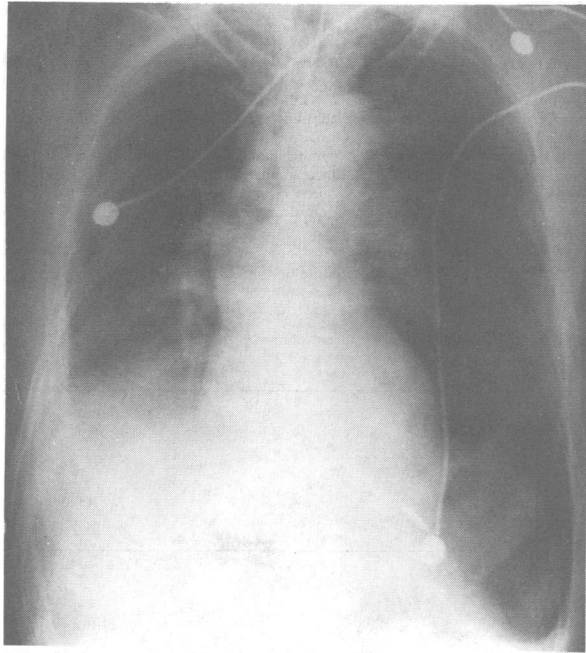
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Case 2—A 72 year old man suffered a cardiac arrest after cystourethroscopy for clot evacuation. Subsequent electrocardiograms showed an acute anterior myocardial infarction. Resuscitation was successful, but he required assisted ventilation because of pulmonary oedema and respiratory failure. Three days later the pulmonary oedema worsened and the ventilator inflation pressure rose to 80 cm water. There was an initial response to diuretics, but three hours later he developed bronchospasm and the blood pressure fell to 70/40 mm Hg. A supine chest radiograph showed that the pulmonary oedema was clearing. The radiograph was similar to that shown in the figure, but evidence of a left pneumothorax again went unrecognised until erect radiography was done six hours later. A chest drain was inserted and his condition improved.

Case 3—A 77 year old insulin dependent diabetic was admitted after he had been knocked down by a car. His injuries included scalp lacerations, fractures of the third to seventh ribs on the left side, a fractured mandible, a compound comminuted fracture of the right humerus, and a compound comminuted fracture of the left tibia and fibula. After insertion of a central



Case 1. Chest radiograph taken with patient supine.

line by way of the right subclavian vein a chest radiograph showed a right pneumothorax, and a chest drain was inserted. Under general anaesthesia the scalp lacerations were sutured, the fractures of the tibia and humerus debrided, and a Denham pin inserted. Despite fluid replacement soon after surgery the patient became hypotensive. Peritoneal lavage showed no evidence of intra-abdominal bleeding. A Swan-Ganz catheter was inserted and a supine radiograph taken to check its position. This showed an obvious right pneumothorax, which had persisted despite the drain. In addition, on the left side air was visible in the anterior costophrenic sulcus, the left border of the heart had become more sharply defined, and an apical pericardial fat pad had become outlined by the surrounding air. It was not possible to detect this left sided pneumothorax clinically, but the radiological appearances

were recognised by a clinician. Horizontal ray decubitus radiography with the patient on his right side visualised the left lung edge. The patient improved after insertion of a chest drain on the left.

Discussion

In the radiograph of an erect patient a pneumothorax is usually apical and comparatively easy to detect. It appears as an apicolateral transradiancy devoid of vessels, bounded on its inner side by the visceral pleural line. When the patient is supine pleural air moves to the most superior part of the chest and comes to lie anteromedially towards the base. In the frontal chest radiograph, unless the pneumothorax is sizable, it may not extend far enough posteriorly to separate lung from chest wall at the apex or laterally and the classical radiological signs of a pneumothorax will be absent. In this setting a pneumothorax may truly be undetectable in the radiograph or it may be manifested by one or more subtle signs—namely, relative transradiancy of the lower chest and upper abdominal quadrant¹; deepening of the lateral costophrenic sulcus²; the appearance of the anterior costophrenic sulcus as an oblique interface extending downwards and outwards across the diaphragm¹; sharp delineation of the diaphragm³ and cardiac border, particularly the apex, with apical pericardial fat pads sometimes appearing as lobulated discrete opacities⁴; a vertical line on the right just inside and parallel to the chest wall, caused by retraction of the middle lobe from the chest wall.⁵

The radiograph reproduced in the figure shows increased transradiancy on the left, the left heart border appears unusually sharp, and air delineates the anterior costophrenic sulcus. The lower border of this air is formed by the reflection of the parietal pleura off the diaphragm and on to the chest wall anteriorly.¹ It appears as a line rather than an interface because of gas lying below in the stomach and colon. The dome of the diaphragm can be seen to lie much higher, a finding which has been referred to as the “double diaphragm” sign.⁴ The radiograph in case 2 was similar. Both cases were presented at a routine meeting, which led to prompt diagnosis of the third case by a clinician previously unfamiliar with the signs.

As is usual with urgent, out of hours radiographs, none was seen initially by a radiologist. Nevertheless, radiologists may not perform much better than clinicians.³ It is easy to learn to recognise these radiological signs, and all clinicians concerned with the critically ill should make sure that they can. A horizontal ray decubitus radiograph with the patient lying on the unaffected side should confirm the diagnosis.

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In a patient with Crohn's disease who has an ileovesical fistula is treatment with Imuran (azathioprine) preferable to surgery?

Accepted teaching is that early surgery is essential for ileovesical fistula complicating Crohn's disease, firstly, to relieve unpleasant urinary symptoms (usually those of recurrent cystitis), and, secondly, to prevent progressive irreversible renal damage. Nevertheless, the morbidity of an enterovesical fistula may not be so severe as previously feared.¹⁻³ Although they only rarely heal spontaneously,² three patients with such fistulas healed within four months of taking azathioprine.³ Only small numbers have been treated in this way, and the long term risk of renal damage and of recurrence of fistula is not known. Moreover, long term treatment with azathioprine

carries the risk of intrahepatic cholestasis, pancreatitis, and bone marrow depression, as well as the possibility of future lymphoma. As surgery usually offers a relatively simple and successful answer it seems unwise to advocate a policy of medical treatment except where surgery is either contraindicated or refused.—JAMES COX, senior registrar, Kingston upon Hull.

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