Psychogenic breathlessness in general practice

J. V. SALINSKY, M.R.C.P.
General Practitioner, Wembley, Middlesex

During four months in general practice I was consulted by five patients who complained of breathlessness with no evidence of organic disease of the heart or lungs. A sixth patient had been seen six months earlier. All showed evidence of emotional disturbance, chiefly anxiety, but were convinced that their symptoms were due to serious physical disease. In all the patients described physical examination, blood count and chest x-ray were normal. ECG was carried out and found to be normal in cases 1, 2 and 5.

Patients

(1) *Male aged 26, married, no children.* He first developed breathlessness while on holiday in France. He felt that he was unable to breathe deeply enough to remain alive (" I experienced complete starvation of oxygen "). The episode occurred when he was at rest. Breathlessness persisted for over an hour; he developed rigidity of the arms with painful tingling of the fingers. He was admitted to hospital in Paris where he was given injections of calcium and morphine and discharged after a few days.

Subsequently he complained of less severe episodes of breathlessness without tetany. During attacks he would feel weak and faint for several hours. His marriage was not satisfactory and his wife left him a few months after the first episode.

(2) *Female, aged 33, married but separated, no children.* She developed breathlessness with central chest pain while at home during the evening. She felt unable to breathe inadequately, felt faint and thought she was going to die. An emergency doctor was called by her friend who was alarmed. She was admitted to hospital as a possible case of myocardial infarction. Her symptoms rapidly subsided without treatment and no abnormality was found on investigation. She was discharged the next day. Similar episodes had occurred for several years while she and her husband were together. Usually she had been able to control them without calling for help. Divorce proceedings were under way and she was receiving psychotherapy.

(3) *Male, aged 28, unmarried.* He complained of breathlessness starting the previous day, at rest, and still present at the time of consultation. He did not appear breathless and spoke easily. He found it difficult to " get enough air into the lungs " and this was associated with tightness across the chest, headache and a feeling of imminent death. There had been several previous attacks in the past year, each lasting several hours or days. In the past he had suffered from mild bronchial asthma up to the age of 14. However, the dyspnoea then had been of a different quality with more difficulty breathing out and none in breathing in.

(4) *Female, aged 23, married, no children.* She complained of episodes of breathlessness lasting one or two hours occurring several times a week for several years. They often occurred while shopping or doing housework but had also occurred at rest. Breathlessness was accompanied by sweating and tightness in the throat. Inspiration was more difficult than expiration. However deeply she breathed in it never seemed to be enough. Her case record revealed the following past history: 1965 " Worried that she might stop breathing during the night ". 1967 Breathless continuously for two days. Admitted to hospital as a suspected case of pneumothorax. No abnormality found and discharged after 24 hours.

(5) *Female, unmarried, aged 18.* She complained of feeling depressed and sleepy for several weeks. She looked depressed and wept during the interview. She described two episodes each lasting several hours, in which she felt breathless with inability to breathe deeply. She had sweating and tingling of the fingers and felt that she was going to faint. In the past she had complained of ' blackouts ' in 1970 which were faints or near-faints. In 1971 she had been treated for depression with tricyclic drugs.

(6) *Female, aged 62, unmarried.* She complained of feeling continuously breathless for two months. The sensation was worse on climbing stairs but was never very severe. She was always very conscious of her breathing and of the need to take deep enough breaths. She had no pains or paraesthesiae. She was a school teacher who found it increasingly difficult to cope with her charges and was looking forward to retirement. There was no past history of breathlessness.

Management

Treatment consisted of:

(1) Allowing the patient to describe the sensations fully.

(2) Exclusion of organic disease with full physical examination and a few simple investigations. Firm reassurance was given about this.

(3) An explanation about the nature of breathless attacks and hyperventilation. Patients were told that anxiety gave rise to excessive activity of the nervous system resulting in a feeling

that deeper breathing was needed. They were asked to remember during attacks that ordinary breathing was really enough and there was never any danger.

(4) Mild sedation with diazepam and treatment of any underlying depression with tricyclic antidepressants.

Results of treatment

At the first interview all the patients seemed grateful for the opportunity to discuss the problem and relieved that they were not suffering from serious disease. Patient 1 when followed up six months later was having regular psychotherapy from another general practitioner. He still felt unwell but had no further breathless attacks. Patient 2 continued to have attacks and was also having psychotherapy. Patients 3 and 4 had no further attacks when interviewed two months later.

Patients 5 and 6 when seen a month later were still having minor attacks every few days but found them less frightening. Treatment of the autonomic effects of anxiety with β adrenergic blockers has been described by Granville-Grossman and Turner (1966) and this is now being tried with both patients.

Discussion

Breathlessness is a subjective sensation originating in sensory information from receptors in the thoracic joints, lungs and airways, where extra loads are sensed (Newsom Davis, 1967). Since the experiments of W. B. Cannon (1928) it has been clear that emotional disturbances can affect bodily functions through the mediation of the autonomic nervous system. It seems that these patients are receiving false signals indicating a need to breathe more deeply. This results in further anxiety and in some cases hyperventilation with its attendant symptoms of paraesthesiae, syncope, headache, sweating and occasionally tetany (patient 1).

Attacks of dyspnoea without organic disease have been described by numerous authors. Lewis (1943) found that the ' disease ' pursued a fluctuating course with asymptomatic intervals. Paul Wood (1941) described it as a component of the effort syndrome whose main feature was chest pain in the absence of organic heart disease. Rice (1950) found an incidence of hyperventilation as a cause of presenting symptoms in 10·7 per cent of 1,000 patients attending an internal medicine clinic.

More recently Burns and Howell (1969) undertook a detailed examination of 31 patients with mild chronic bronchitis whose breathlessness was disproportionately severe. These patients had a characteristic type of breathlessness whose features included a subjective difficulty in taking deep enough breaths, a poor relationship to exertion, rapid fluctuation in severity and an associated fear of dying. Other symptoms including partial loss of consciousness, sweating, tingling, cramps, palpitations and chest tightness were also more common than in controls with more severe bronchitis.

The six patients described above have clear similarities to these ' disproportionately breathless ' patients. However they all felt that they had organic disease, probably of a serious kind. Three of the six had been admitted to hospital as emergencies which tended to reinforce this impression. At other times they had been dismissed too lightly by their medical advisers—' there's nothing wrong with you—it's all your imagination '.

Hence although the syndrome is common it is often unrecognised. Complaints of difficulty in taking adequately deep inspirations leading to hyperventilation and a fear of dying seem to be important diagnostic clues. Recognition of psychogenic breathlessness is easier than treatment which may be unrewarding. However, accurate positive diagnosis and sympathetic management are appreciated by the patients and save unnecessary admission to hospital.

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