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Telesales neuropathy

M B Lewis

Abstract

A case of bilateral ulnar neuropathies caused by overuse of the telephone is described in a 17 year old double glazing salesman. The importance of taking a good occupational history is emphasised and the need for correct staff training and appropriate equipment highlighted.

(*Postgrad Med J* 2000;76:793–797)

Keywords: ulnar neuropathy; telephone use

The last few years have seen an explosion in the number of business that are abandoning the expense of operating from branches in favour of doing business at a distance, either over the internet or, more commonly, by telephone. Telesales is a major growth area and it brings with it its own spectrum of occupational diseases.

Case report

A 17 year old right handed Asian man was referred by his general practitioner with a progressive six week history of tingling and weakness affecting both hands, particularly the left. He had also noticed that the little finger on his right hand and the little and ring fingers on his left hand were becoming permanently bent and he could only straighten them by using his other hand.

He was still at college and three months earlier he had started an evening job as a telesales operator for a double glazing company. On an

Summary points

- Occupations with repetitive elbow flexion/extension can result in ulnar nerve dysfunction.
- Simple education and provision of appropriate equipment is important in minimising the risk of occupational neuropathies.
- A good occupational history is important in the medical diagnosis.
- New technologies bring with them their own spectrum of occupational diseases.

average night he would make around 100 telephone calls. Although he was right handed, he usually used the telephone in his left hand so as to leave his right hand free for writing, and would lean his elbow on the desk. There was nothing else of any note in the history.

General examination was normal and on neurological examination the abnormalities were restricted to the hands. He had wasting and weakness of the ulnar innervated small muscles of both hands, much worse on the left. There was clawing of the little and ring fingers on the left (fig 1) and of the little finger on the right. The median and radial nerve innervated muscles were normal. Sensory testing revealed decreased sensation over the little fingers and the medial half of the ring fingers bilaterally. He had a normal male carrying angle at both elbows and no abnormality was palpable over the cubital tunnels or ulnar grooves.

Nerve conduction studies confirmed the clinical diagnosis of bilateral ulnar entrapment neuropathies at the elbow. The remaining investigations to look for an underlying cause, including genetic testing for hereditary neuropathy with liability to pressure palsies (HNPP), were negative.

Discussion

In this patient the use of an ordinary hand held telephone to make so many calls, and the patient's habit of leaning on his elbow while

Figure 1 The clawing of the little and ring fingers on the left hand is clearly seen in this image.

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Submitted 1 December 1999
Accepted 27 April 2000

holding the telephone, probably both contributed to the rapid development of bilateral ulnar neuropathies.

Ulnar neuropathies at the elbow and other anatomical sites have been described from many causes,¹ some rather unusual,²⁻³ but this is the first description of the syndrome occurring because of overuse of the telephone. Despite the increasingly sedentary lives of people today, occupational neuropathies previously associated with manual work continue to occur. The introduction of new technologies has simply expanded the spectrum of causative occupations.⁴⁻⁵

This case highlights the fact that people involved in the rapidly expanding area of telesales need proper training and should be provided with the most appropriate equipment to do their job. A simple head set device would have prevented the injuries occurring at all.

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