Missed diagnosis

Dysphagia, a reversible cause not to be forgotten

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Summary

An 84-year-old man presented with dysphagia two years after the onset of symptoms. Repeated assessments at both ENT and neurology clinics had not recorded any of the more classical signs of Parkinson's disease and these did not become apparent until intercurrent illness had been treated. Once diagnosed, treatment was started and dramatic improvement was seen.

Keywords: dysphagia, Parkinson's disease

Introduction

Dysphagia is a frequent and potentially fatal complication of Parkinson's disease but is generally thought to occur in its later stages.¹ Although documented as a presenting feature previously, the more classical signs of tremor, cogwheel rigidity, and bradykinesia, were also recorded at the same time.²

We describe what we believe to be the first case of Parkinson's disease presenting as dysphagia two years before the onset of any other parkinsonian symptoms or signs, and its subsequent resolution with treatment.

Case report

An 84-year-old man presented in extremis, having experienced increasing difficulty swallowing for two years. He was dehydrated, with clinical and radiological features consistent with a right lower lobe pneumonia, assumed to be the result of aspiration.

During the preceding two years he described increasing dysphagia, to liquids more than solids, although in the period immediately prior to admission he had been unable to swallow anything. Fourteen months prior to admission he was assessed by an ear, nose and throat surgeon because of the dysphagia. Pooling of saliva in the valleculae was recorded; a barium swallow showed incoordination of the epiglottis with failure to guard the airway and subsequent barium aspiration. In the year before admission he was seen twice by a neurology consultant and even six weeks prior to his hospitalisation neurological examination was documented as normal. Several investigations were requested but the patient was admitted prior to their completion because of relentless deterioration in his general condition.

Treatment on admission was with coamilofru-

se and thioridazine. Both were stopped but no improvement in the swallowing reflex was noted. Past medical history revealed little of note and especially no history of cardiac disease, cerebrovascular disease or risk factors for either of these. His family history was unremarkable.

The patient was rehydrated and received intravenous antibodies. A percutaneous gastrostomy feeding tube was inserted. A cerebral computed tomographic (CT) scan showed atrophy consistent with his age but no evidence of cerebrovascular disease, and in particular no evidence of multi-infarct disease. Neurophysiology revealed no evidence of neuropathy or denervation.

Following the clinical improvement resulting from rehydration and infection control, it became clear for the first time that he had expressionless facies, rigidity and bradykinesia. A diagnosis of idiopathic Parkinson's disease was made and treatment started with levodopa.

Over the next two weeks there was a dramatic improvement in his swallowing and general condition. The patient is now swallowing normally, has gained 18 kg in weight and is living at home independently.

Discussion

Up to 50% of patients with Parkinson's disease have dysphagia³ with as many as 46% showing evidence of aspiration⁴ (a proportion being silent⁵).

Though viewed as a late complication, dysphagia is not related to disease severity and shows a variable response to levodopa, with the therapeutic response observed in the general parkinsonian features not correlating well with improvement in swallowing.⁵

The correlation between complaints of dysphagia and abnormalities on barium examination is poor,⁵ with patients who deny having problems often being shown to have marked abnormalities on barium swallow. A recent study has emphasised this, showing that all of a group of 16 patients with Parkinson's disease, who had no complaints of dysphagia, had an abnormality on a modified barium swallow, thus casting doubt on the efficacy of self-reporting of swallowing problems in patients with Parkinson's disease.⁶

Barium-coated pills have also highlighted the problem of ingested medication being retained in the vallecula,⁵ potentially causing problems with dosing. Our patient had prolonged symptoms before other signs of Parkin-

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son's disease appeared. As in previously reported cases, he underwent a series of investigations before the correct diagnosis was

reached. This is an unusual presentation of a common disease and should be considered in all cases of unexplained dysphagia.

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Charles Darwin (1809–82) was born in Shrewsbury, UK, son of a successful local doctor and grandson of Erasmus Darwin and Josiah Wedgwood. He was a medical student at Edinburgh but for two years only (1825–27) and then moved to Christ's College, Cambridge (1828) to study for the church but instead became a naturalist on HMS Beagle (1831–36). He married his cousin Emma Wedgwood (1839) and lived as a country gentleman at Downe, Kent. This is now a research institute of the Royal College of Surgeons. His epoch-making theory of evolution by natural selection was published as "*The Origin of Species by means of Natural Selection*" in November 1859. He is buried in Westminster Abbey, London, UK.