Eponyms in medicine revisited

Gerstmann's syndrome

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Summary

Although Gerstmann's syndrome has been well documented since it was characterised in the latter half of last century, there has not been much literature on it in the last few years. We present a classical case in a patient who was admitted into hospital for an unrelated problem. We conclude that clinical examination still has a valuable role in neurology, despite the availability of excellent imaging techniques.

Keywords: Gerstmann's syndrome

A 55-year-old previously well right-handed man was admitted into hospital with a severe maculopapular drug rash after being given flucloxacillin for cellulitis. The following day his rash was much improved but he casually mentioned to the doctor that he had had problems reading for the previous three days. Subsequent neurological examination did not reveal any visual impairment but revealed that the patient was dyslexic. The patient also had severe dyscalculia, dysgraphia, finger agnosia and right-left disorientation and he had a blood pressure of 170/100 mmHg. There were no other findings apart from a loud carotid bruit on the left side. Further questioning revealed that the patient had had a mild stroke with right-sided weakness about a year previously from which he apparently recovered fully.

A clinical diagnosis of Gerstmann's syndrome was made and a computer tomography (CT) scan confirmed a non-haemorrhagic infarct in the left parietal lobe in the region of the angular gyrus. There was no evidence of hypertensive heart disease or an embolic source from the heart. He was anticoagulated with warfarin as he had previously been on aspirin and his symptoms slowly improved within a month. Carotid Doppler studies surprisingly showed morphologically normal common and internal carotid artery with an atherosclerotic

Josef Gerstmann (1888–1969)

An American neuropsychiatrist originally from Austria. Studied initially in Vienna, emigrated to the US and then became Professor of Neuropsychiatry in Washington DC in the 1920s. He published numerous papers including one describing a syndrome of finger agnosia, right-left disorientation, dyscalculia and dysgraphia, characteristically dissociated dysgraphia (Hinsie and Campbell. *Psychiatric dictionary*, 4th edn, Oxford University Press, 1970). Additional features may include constructive apraxia, amnesic reduction of word finding, dyslexia, impaired perception of colour, absence of optokinetic nystagmus and disturbance of equilibrium.

stenosis of 30–50% in the external carotid artery. He was seen by the neurosurgeon at Oxford where magnetic resonance angiography showed severe stenosis at the origin of the left internal carotid artery. He has just recently come back from Oxford after having had an uncomplicated left carotid endarterectomy.

Discussion

Gerstmann's syndrome is the tetrad of dysgraphia, finger agnosia, dyscalculia, and left-right disorientation sometimes associated with dyslexia and was first localised in the cerebral cortex in 1924 by Josef Gerstmann (box),¹ although references to the clustering of these clinical features were made as early as 1888. It is ascribed to a lesion in the angular gyrus of the dominant parietal lobe. There has not been much literature on it in the past few years.^{2–5} Apart from the much commoner stroke, it can be associated rarely with AIDS or even as part of the fragile X syndrome.^{4,5}

Our case reinforces the advice given to medical students and doctors about the importance of clinical examination in medical practice and shows the localising value of Gerstmann's syndrome.

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Accepted 15 July 1995