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The History of Neurology

Some British contributions to the history of multiple sclerosis

The white matter plaques which characterise multiple sclerosis were described by Cruveilhier (1791–1874)[1] the first professor of Pathological Anatomy in Paris, and by Sir Robert Carswell (1793–1857)[2] whose training started in Glasgow. Carswell, described by Spillane as an "artist-pathologist" was the first Professor of Pathological Anatomy at University College (1828) and later personal physician to the King of the Belgians. His celebrated atlas describes: " *'A peculiar diseased state of the chord and pons Varolii, accompanied by atrophy of the discoloured portions'. Multiple sclerosis: 'yellowish brown' lesions in pons; hard, semitransparent, atrophied 'patches' in spinal chord; 'softening of a portion of the chord'.*"

Early clinical descriptions were provided by Frerichs and Rindfleisch. But the illness was not recognised until the writings of Vulpian and Charcot[3] in France, and somewhat belatedly in Britain by Moxon[4]:

"The recognition of this disease by English physicians will appear singularly slow . . . Although the two cases under my own care of which I shall give the post-mortem appearances are, as far as I know the only ones in which the diagnosis has been made sure by inspection after death, on this side of the channel . . .

"The diagnostic characters of insular sclerosis are—

1. *A peculiar trembling of the head and limbs during movements, ceasing when the parts are supported.*
2. *Paralytic weakness of the extremities without numbness.*
3. *Rigidity or contractions of the lower extremities.*
4. *Nystagmus (twitching of the eyeballs).*
5. *Little disturbance of power over the excretions.*
6. *Normal electro-irritability.*
7. *A peculiar affection of the speech, so that syllables are uttered with morbid distinctness of accent.*
8. *The intellect, and control of emotions ultimately somewhat impaired without morbid delusions or morbid moral aberration.*

When these conditions exist in any patient, it is certain that patient has insular patches of grey change scattered throughout the brain and spinal cord."

Moxon differentiated the "trembling" from chorea and paralysis agitans, and from ataxia—presumably locomotor ataxia. He observed numbness, but lack of sensory techniques explains perhaps his second remark. *"'Escape of urine' occurred late. Enfeeblement of mind included 'laughing incontinently and . . . weeping is equally out of just relation to its proper causes.' 'Hopefulness at one time and depression at another . . .'."*

Moxon stated "*the disease belongs to the climax of life (25 to 45), its duration is very variable and may be prolonged over many years.*" He recognised early remissions "*mild, scarcely recognisable for 5, 8, 10 or more (yrs), . . . disabling characters of it coming out rather abruptly.*" He described the pathology of his two cases in detail emphasising: lesions in the white matter "*scattered in a broadcast style, spherical rounded or oval patches of grey material, considerably harder than the rest of the brain substance.*" Astutely, he noted "*a conspicuous vessel in the centre of a patch . . .*"

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JMS PEARCE