Trichloroethylene cranial neuropathy

- 39 Cabrera CV, Wohlenberg C, Openshaw H, Roy Mendez M, Puga A, Notkins AL. Herpes simplex viruses—DNA sequences in the CNS in latently infected mice. *Nature* 1980;288:288–90.
- 40 Hill TJ, Blyth WA, Harbour DA, Berris EL, Tullo AB. Latency and other consequences of infection of the nervous system with herpes simplex virus. *Prog Brain Res* 1983;59:173–4.
- 41 Sequeira LW, Jennings LC, Carrasco LH, Currey A, Lord NIA, Sutton RNP. Detection of Herpes virus genome in brain tissue. *Lancet* 1979;ii:609–12.
- 42 Efsthathiou S, Minson AC, Field HJ, Anderson JR, Wildy P. Detection of herpes simplex virus-specific DNA sequences in latently infected mice and humans. *J Virol* 1986;57:446–54.
- 43 Henschler D. Metabolism and mutagenicity of halogenated olefins—a comparison of structure and activity. *Environm Hlth Perspect* 1977;21:61–64.
- 44 Reslova S. The induction of lysogenic strains of *Escherichia coli* by *cis*-dichloro-diammineplatinum.(II). *Chem Biol Interact* 1971/1972;4:66–70.
- 45 McAuley J. Trichloroethylene and trigeminal anaesthesia. *Br Med J* 1943;ii:713–4.
- 46 Feldman RG, Meyer RM, Taub A. Evidence for peripheral neurotoxic effect of trichloroethylene. *Neurology* 1970;20:599–606.
- 47 Lawrence WH, Partyk EK. Chronic dysphagia and trigeminal anesthesia after trichloroethylene exposure. *Ann Int Med* 1981;95:710.

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 Charcot³ in France, and somewhat belatedly in Britain by Moxon⁴:

“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 . . .”

References

- 1 Cruveilhier J. *L'Anatomie pathologique du corps humain; descriptions avec figures lithographiées et coloriées; diverses alterations morbides dont le corps humain est susceptible*. Vol 2; Liv 32, pl 2, pp 19–24; Liv 38, Pl 5, pp 1–4. Paris: Bailliere, 1829–42.
- 2 Carswell R. *Illustrations of the Elementary Forms of Disease*. Pl IV. London: Longman, 1838.
- 3 Charcot M. *Lectures on Diseases of the Nervous System*. Vol i, p 214. Translated and edited by George Sigerson. London: The New Sydenham Society, 1881.
- 4 Moxon W. Eight cases of Insular Sclerosis of the brain and spinal chord. *Guy's Hospital Reports* 1875;20:437–80.

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