

ataxia and an abnormal EEG two weeks after a presumed meningoencephalitic illness with complete recovery over the ensuing three weeks. Hopkins and Michael<sup>19</sup> described a 36 year old male who developed rhythmic myoclonus of the pelvis and lower limbs which lasted one week, was associated with absent knee and ankle jerks and electrophysiological evidence of a spinal origin for the myoclonus. There was no history of a preceding illness but a CSF pleocytosis and raised protein level suggested a recent (probable viral) infection. These patients did have evidence of CNS inflammation (encephalitis<sup>18</sup> and myelitis<sup>19</sup>) and so were excluded as examples of *isolated* post-infectious myoclonus according to our criteria.

Why some patients should develop myoclonus without clinical or investigative evidence of structural damage of the CNS following non-specific or uncomplicated infectious illnesses is unclear. The pathophysiological origin of the myoclonus in our two cases is uncertain. Case 1, with generalised myoclonus, on one occasion was found to have runs of polyspike/spike potentials at 5–6 Hz on EEG corresponding to her jerks pointing towards a probable cortical origin of the myoclonus. In case 2, back-averaging of the EEG did not reveal any cortical correlates nor did she have enlarged somatosensory evoked potentials, suggesting that the myoclonus was probably not of cortical origin. No EEG correlates corresponding to the myoclonic jerks were reported in Silfverkiöld's cases with rhythmic upper and lower limb myoclonus.<sup>17</sup> As might be expected therefore it appears that post-infectious myoclonus is a heterogenous entity and that different sites of the CNS can be affected. The underlying pathology is also uncertain.

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### Early notions of hydrocephalus

The truth of claims that Hippocrates recognised hydrocephalus and drained the ventricles through the fontanelle is uncertain. Two patients are described in the second edition of Vesalius' *De Fabrica* (1555)<sup>1</sup>: in a two year old girl he had obtained "9lbs of water from the ventricles. I marvelled at nothing more than the amount of water had for so long collected in the ventricles of the brain without greater symptoms."

In 1761 Contugno described the cerebrospinal fluid (CSF).<sup>1</sup> The remarkable Stockholm mystic, Emmanuel Swedenborg (1688–1772), left manuscripts unpublished until 1882 and 1887 showing that he recognised not only the four ventricles, but also the secretory role of the choroid plexuses and the circulation of CSF through the 4th ventricle in the medulla, "through a cleft in its ceiling, between the pia and dura mater, and thence to the spinal cord".

The eighteenth century anatomists Morgagni, and the physician Robert Whytt demonstrated the relevant CSF pathways and made some sense of the pathology of hydrocephalus.<sup>3</sup>

In the nineteenth century Magendie (1828), Luschka (1855) and above all, Key and Retzius described the CSF flow and formation. In his "Essay on hydrocephalus acutus" (1808), John Cheyne recorded 23 cases; all but six succumbed and the aetiology in most was probably tuberculous meningitis.<sup>1</sup>

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