



Letters to the Editor

Post-traumatic syringomyelia and post-traumatic spinal canal stenosis

The authors of this paper appear to have confused the occurrence of a post-traumatic cyst or syrinx (seen in some 50% of cases as a normal intermediate pathological change following spinal cord injury) with post-traumatic syringomyelia, a relatively uncommon and progressive disorder¹.

Their distinction between a cyst and a syrinx is largely artificial, and it is difficult to see how they can diagnose a progressive condition on a single scan.

It is not true that 'the incidence of PTS is increasing'. The reported incidence is increasing a little as a result of increasingly sophisticated investigations and greater attention being paid to the subject.

Their reported incidence of 22 patients (some 30%) with neurological deterioration is extraordinarily high, and one can only assume that a significant number of the patients in their survey had been admitted to hospital for investigation of this. This in turn must lead to a significant bias in the patient population and should have been discussed in the paper. Even so, it appears that in half of these cases the neurological deterioration was unexplained and was not associated with the presence of a syrinx.

All in all, the paper is misleading and confusing in some respects and the statistical incidence of post-traumatic syringomyelia and neurological deterioration quoted is unreliable without further explanation.

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References

- 1 Hughes JT. Pathology of the Spinal Cord. *Lloyd Luke Ltd.* 1978. pp. 98–101.

In reply to Dr RG Pringle

The letter of Dr RG Pringle raises several problems:

- (1) The first point is the distinction made by Dr Pringle between, on the one hand Cyst and Syrinx which are neuroradiological findings and, on the other hand Post-traumatic Syringomyelia (PTS) which is considered as a progressive clinical disorder. We do not agree with this

distinction: cysts are stabilised lesions confined to the site of injury, whilst syrinxes are progressive and extend beyond the limit of the vertebral injury and the initial extent of the lesion-syndrome. This is what our own experience has taught us, and has previously been demonstrated in the literature.¹ From a pathophysiological point of view, syrinxes and post-traumatic syringomyelia (PTS) are the same phenomenon, the PTS being the clinical expression of extended syrinxes. The neuroradiological distinction between cysts and syrinxes is not artificial and is easily demonstrated on good MRI images.

- (2) Dr Pringle does not agree with our sentence: 'the incidence of PTS is increasing in the recent literature'. This results from a misunderstanding, what is said is that the incidence of PTS is increasingly recognised, partially because of the development of spinal injury treatment centers and the systematic follow-up of this population by specialized teams, and in part by the improvement of the neuroradiological means of investigation (ie MRI).
- (3) Our incidence of neurological change is higher than the incidence found by Wang in 1996 (23%). These neurological changes include clinical symptoms which are subjective ones such as neurogenic pain, increased spasticity, hyperhydrosis, and clinical signs such as ascending sensory level, loss of reflexes, motor deficit. In half of the patients we found no syrinxes but in 36% of these cases, we found atrophy. This observation raises the problem of post-traumatic non cystic myelopathy. The explanation of this high incidence of neurological change can be due to the fact, that in all patients reviewed we systematically sought for symptoms and signs of PTS. Dr Pringle evokes a possible bias of selection. If it exists, it is minor because we follow systematically our patients, yearly in 80% of the cases. We cannot totally eliminate the fact that patients with problems are more compliant with follow up and with investigations.

To conclude, the objective of this study was to correlate the occurrence of syrinxes with canal stenosis. There is no confusion in our mind between neuroradiological sequelae of the injury as cysts, and syrinxes and PTS which are the same pathophysiological process.

Dr B Perrouin-Verbe

References

- 1 Wang D *et al.* A clinical magnetic resonance imaging study of the traumatised spinal cord more than 20 years following injury. *Paraplegia.* 1996; **34**: 65–81.