LETTERS TO THE EDITOR

Numb chin syndrome in the elderly

The numb chin syndrome is due to an isolated mental nerve palsy. Since the earliest description by Charles Bell in 1830, the condition has been described in association with a number of conditions including tumour of the jaw, trauma and drug toxicity.[1 2] The following cases differ from those previously reported.

A 73 year old woman (case 1) noticed numbness in the chin for three months. Hypoaesthesia was detected in the area shown in fig 1. Neurologically she had no other abnormality. Skull radiographs showed that her mandible was considerably atrophic and edentulous. She had a gastric ulcer, but extensive studies for malignancy were negative. Details of the case have been described elsewhere.[3]

An 81 year old man (case 2) had been treated for Parkinson's disease. Sensation on the chin was examined and was found to be decreased bilaterally on the lower lip and chin. The patient had no teeth and the mandible was atrophic. When the mental nerve was pressed with a fingertip at the outlet of the mental foramen, he experienced pain in the area supplied by the nerve.

A 69 year old woman (case 3) presented with left-sided facial spasm. Neurological examination revealed no abnormalities except for occasional twitching of the left eyelid and bilateral numbness of the chin. Skull radiographs revealed an atrophic edentulous mandible.

The salient findings common to all three cases is the markedly atrophic mandible. In 1806 Charles Bell, in his "Essays on the anatomy of expression in painting",[4] described the characteristic facial features of elderly people as due to the lack of teeth and of that part of the jawbone which supports them. Fig 2 is taken from his monograph,[4] and clearly illustrates the markedly atrophic mandible in the elderly. It is worth emphasising that the site of the mental foramen is changed as the bone becomes atrophic. In the markedly atrophic mandible, pressure around the outlet of the foramen causes pain.

I consider an atrophic mandible to be one of the causes of the numb chin syndrome in the elderly. Mild numbness in the chin causes no difficulty in daily life and the patient is usually symptomless. However, if elderly people are carefully examined, numb chin syndrome is not rare and often not due to serious illness but to the natural ageing process.

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1 Furukawa T. Charles Bell's description of numb chin syndrome. *Neurology* 1988;38:331.
2 Bell C. *The nervous system of the human body.* London: Longman, 1830.
3 Karasawa H, Kin H, Furukawa T. Numb chin syndrome. *Neurol Med* (Tokyo) 1986;25:1–3.
4 Bell C. *Essays on the anatomy of expression in painting.* London: Longman, 1806.

Methylprednisolone therapy in tropical spastic paraparesis

Tropical spastic paraparesis (TSP) is associated with high titres of HTLV-1 antibodies in serum and CSF, and oligoclonal bands of IgG or IgM in the CSF, specific for HTLV-1.[1-3] The pathogenesis of TSP is uncertain. Local immunoglobulin production and perivascular inflammatory exudate is consistent with an immune mechanism. Oral prednisolone was reported to be beneficial in four of six patients with HTLV-1 associated myelopathy.[4] We report the effects of treating nine patients with TSP, all of whom had HTLV-1 antibodies in serum and CSF, and evidence of HTLV-1 infection of peripheral blood leucocytes from polymerase chain reactions, with a five day course of 500 mg intravenous methylprednisolone (table 1).

The results are summarised in table 2. Pain and paraesthesiae in the back and legs were prominent in seven patients. In four patients, these symptoms improved for between three weeks and four months; there was no change in three. Spasticity was marked in eight patients and three improved: one improved for one week, one for six weeks and one remained improved at eight months. All nine patients had pyramidal weakness in the legs; four improved for one to six weeks, and in one the improvement appeared to be continuing at eight months, four did not improve. All nine suffered urgency and incontinence of micturition, and five had sensory loss in the legs. These symptoms did not improve in any patient. In three patients, there was no improvement in any symptom. There were no complications. In seven patients HTLV-1 antibody titres were measured in serum and CSF before and immediately after giving methylprednisolone, and in all nine patients the repeated estimation of serum titres for up to one year did not reveal any significant changes.

In conclusion, a five day course of methylprednisolone did not have any sustained benefit in nine patients with TSP, apart from one patient in whom tone and power remained improved at eight months. Three patients showed no benefit and in the remainder, improvement was only transient. Further, as the study was not blinded, positive placebo effects may have contributed to the apparent short term benefits. The utility of methylprednisolone in TSP appears to be limited.

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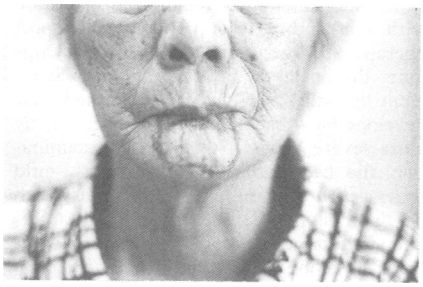

Figure 1 Case 1: Hypoesthesia is present on the lower lip and chin as shown.

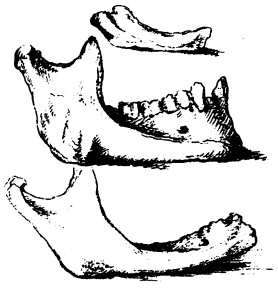

Figure 2 Mandibles of infant (top), adult (middle) and elderly person (bottom) by Charles Bell.[4]

Table 1 Clinical features

No	*Age, sex*	*Duration (year)*	*Sphincter dysfunction*	*Pain and Paraesthesiae*	*Spasticity*	*Pyramidal weakness*	*Sensory loss**
1	65f	11	+	+	+	+	–
2	39m	2	+	+	+	+	+
3	51f	1	+	–	+	+	–
4	60m	0·5	+	+	+	+	+
5	50f	7	+	+	+	+	+
6	60f	18	+	+	+	+	–
7	56f	11	+	+	+	+	–
8	54f	18	+	–	+	+	+
9	55f	18	+	+	–	+	+

*Impaired proprioception and vibration in legs (and impaired pinprick sensation in 1).
+ = Present – = Absent.

Table 2 Effect of methylprednisolone and duration of benefit

No	*Sphincter dysfunction*	*Pain and Paraesthesiae*	*Spasticity*	*Pyramidal weakness*	*Sensory loss**
1	–	+ (4 months)	+ (8 months +)	+ (8 months +)	NA
2	–	–	–	–	–
3	–	NA	–	–	NA
4	–	+ (6 weeks)	+ (6 weeks)	+ (6 weeks)	–
5	–	+ (4 weeks)	–	–	–
6	–	+ (3 weeks)	–	+ (3 weeks)	NA
7	–	–	+ (1 week)	+ (1 week)	NA
8	–	NA	–	–	–
9	–	–	NA	+ (4 weeks)	–

NA = Not applicable.
– = No effect.
+ = Beneficial effect (duration).