(MRI) should be performed in the evaluation of a patient with hemifacial spasm (HFS). Unfortunately, at that time, it was not as available as it is today.

Selective neurectomy of peripheral facial nerve branches is still one of the best procedures that can be performed in HFS with an 80 per cent success rate (Bauer and Coker, 1996). We believe that the patient must be given the choice to decide the type of operation to be performed, either the intra-cranial approach, or the selective peripheral neurectomy.

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References

Bauer, C. A., Coker, N. J. (1996) Update on facial nerve disorders. *Otolaryngologic Clinics of North America* **29:** 445–454.

Abductor vocal fold palsy in the Shy-Drager syndrome presenting with snoring and sleep apnoea

Dear Sir,

I read with interest the excellent case report entitled 'Abductor vocal fold palsy in the Shy-Drager syndrome presenting with snoring and sleep apnoea' by McBrien *et al.* (1996). The authors rightly point out the risks associated with anaesthesia in these patients, but do not mention the reports of sudden death during sleep in Shy-Drager patients with vocal fold dysfunction and obstructive sleep apnoea. Sleep apnoea from laryngeal obstruction in Shy-Drager syndrome carries a far worse prognosis than common idiopathic sleep apnoea, and deserves further discussion.

Reports of sleep-related stridor in Shy-Drager syndrome date back to 1967 (Bannister *et al.* 1967). Lehrman *et al.* (1978) noted the association between Shy-Drager syndrome, vocal fold paresis, and obstructive sleep apnoea; although tracheostomy was planned in their patient, sudden death during sleep occurred before definitive treatment of upper airway obstruction could take place. Since 1978, several additional case reports and series have supported the concept that obstructive sleep apnoea related to vocal fold abductor paralysis can be lethal in Shy-Drager syndrome (Briskin *et al.,* 1978; Williams *et al.,* 1979; Kavey *et al.,* 1989; Munschauer *et al.,* 1990). The compelling nature of these reports has supported recommendations that symptoms or signs of obstructive sleep apnoea in these patients should be immediately evaluated by overnight polysomnography, followed by emergent tracheostomy if obstruction is demonstrated (Kavey *et al.,* 1989; Munschauer *et al.,* 1990). In addition, diurnal vocal fold dysfunction appears to be highly prevalent in these patients, and may be present even in early stages of the disease and/or without symptoms of stridor or snoring (Williams *et al.,* 1979). It may well be prudent to suggest that all Shy-Drager patients undergo routine laryngological examination (Williams *et al.,* 1979), followed by overnight polysomnography if vocal fold paresis is noted. Maximal inspiratory/expiratory flow-volume loops should also be useful in screening these patients for upper airway obstruction.

It is not certain why patients with Shy-Drager syndrome and obstructive sleep apnoea, in contrast to those with idiopathic obstructive sleep apnoea, are so prone to sudden death during sleep. Autonomic cardiovascular instability from their disease may be responsible, or it may be a consequence of the laryngeal nature of the obstruction. While tracheostomy has been most frequently performed for definitive treatment of the upper airway obstruction, laryngofissure and fold lateralization has also been reported (Kenyon *et al.,* 1984). Unfortunately, sudden death during sleep still occurs in some Shy-Drager patients even after relief of upper airway obstruction, presumably from the central apnoeas also noted to occur in this disease, or perhaps from cardiovascular instability (Briskin *et al.,* 1978; Bannister *et al.,* 1981).

Incidentally, Isozaki and colleagues (1994) have recently provided some intriguing information concerning the mechanism of laryngeal obstruction in these patients. Using a novel catheter electrode array, they demonstrated both abductor paresis (posterior cricoarytenoid muscle) as well as persistence of adductor tone (thyroarytenoid muscle) during inspiration in some Shy-Drager patients with vocal fold paralysis, raising the possibility that laryngeal obstruction in this disorder may in part be dyskinetic as well as paralytic.

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References

Bannister, R., Ardill, L., Fentem, P. (1967) Defective autonomic control of blood vessels in idiopathic orthostatic hypotension. *Brain* **90:** 725–746.

Bannister, R., Gibson, W., Michaels, L., Oppenheimer, D. R. (1981) Laryngeal abductor paralysis in multiple system atrophy. *Brain* **104:** 351–368.

Briskin, J. G., Lehrman, K. L., Guilleminault, C. (1978) Shy-Drager syndrome and sleep apnea. In *Sleep Apnea Syndromes.* (Guilleminault, C., Dement, W. C., eds.), Alan R. Liss Inc., New York, pp 317–322.

Isozaki, E., Osanai, R., Horiguchi, S., Hayashida, T., Hirose, K., Tanabe, H. (1994) Laryngeal electromyography with separated surface electrodes in patients with multiple system atrophy presenting with vocal cord paralysis. *Journal of Neurology* **241:** 551–556.

Kavey, N. B., Whyte, J., Blitzer, A., Gidro-Frank, S. (1989) Sleep-related laryngeal obstruction presenting as snoring or sleep apnea. *Laryngoscope* **99:** 851–854.

Kenyon, G. S., Apps, M. C. P., Traub, M. (1984) Stridor and obstructive sleep apnea in Shy-Drager syndrome treated by laryngofissure and cord lateralization. *Laryngoscope* **94:** 1106–1108.

Lehrman, K. L., Guilleminault, C., Schroeder, J. S., Tilkian, A., Forno, L. N. (1978) Sleep apnea syndrome in a patient with Shy-Drager syndrome. *Archives of Internal Medicine* **138:** 206–209.

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McBrien, F., Spraggs, P. D. R., Harcourt, J. P., Croft, C. B. (1996) Abductor vocal fold palsy in the Shy-Drager syndrome presenting with snoring and sleep apnoea. *Journal of Laryngology and Otology* **110:** 681–682.

Munschauer, F. E., Loh, L., Bannister, R., Newsom-Davis, J. (1990) Abnormal respiration and sudden death during sleep in multiple system atrophy with autonomic failure. *Neurology* **40:** 677–679.

Williams, A., Hanson, D., Calne, D. B. (1979) Vocal cord paralysis in the Shy-Drager syndrome. *Journal of Neurology, Neurosurgery and Psychiatry* **42:** 151–153.

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