Vestibular Schwannoma with contralateral facial pain – Case Report

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Vestibular schwannoma (acoustic neuroma) most commonly presents with ipsilateral disturbances of acoustic, vestibular, trigeminal and facial nerves (3). Contralateral trigeminal nerve dysfunction as a false localizing sign in acoustic neuroma has been documented. (2,4,5) Though contralateral facial pain in the form of trigeminal neuralgia has been mentioned as false localizing sign for posterior fossa and cerebellopontine angle tumors (1,6,7,8), presentation of vestibular schwannoma with contralateral facial pain is quite uncommon. Among 156 cases of vestibular schwannoma operated upon in Sina hospital during past 6 years, the following case had this unusual presentation.

This 44-year old illiterate woman presented with one month history of right hemifacial pain, ataxia, progressive vertigo and left sided hearing loss. The pain was burning and constant without any relation to specific position or movement. The pain had started gradually, and become increasingly annoying, so that the patient had sought medical consultation mainly for her facial pain. Physically the patient had mild left facial paresis. Her right hemifacial was dysesthetic in territories of all three subdivisions of trigeminal nerve. Otherwise, neurologically she had disturbed cerebellar tests especially on the left, left sided hearing loss and hypoactive corneal reflexes on both sides. In her MRI with
and without contrast a giant (45x44x42 mm) left CP angle nonhomogenous mass compatible with vestibular schwannoma was seen (fig 1). Though we could not figure out any specific differences between this MRI and imaging of other giant vestibular schwannomas with typical presentations in our file, the rostral and medial extension of the tumour and distortion of the brainstem was remarkable in this case. The patient was operated upon by retrosigmoid approach in sitting position. Pathologic examination of the tumour confirmed the preoperative diagnosis of vestibular schwannoma. Postoperatively (fig 2) her right hemifacial pain was relieved and her corneal reflexes returned to normal activity. The left facial nerve function could not be preserved.

DISCUSSION

Different reasons have been mentioned for contralateral facial pain in cerebellopontine angle and posterior fossa tumors including size of the tumour and subsequent displacement of the brainstem, angulations and distortion of the appropriate nerve root fibers, the nature of tumor, the anatomic variation of posterior fossa, the relationships of cranial nerves and nearby blood vessels and the compression of the contralateral trigeminal nerve in Meckel’s cave by the large mass (2,4). In some patients, removing of the tumor results in relief of contralateral pain. This seems to be due to return of the brainstem to its normal position and reversing the contralateral pain
producing mechanism, as has happened with our case. Persistent contralateral pain after removal of the contralateral posterior cranial fossa tumor has also been reported possibly due to arachnoid adhesions and arterial loops(8).

CONCLUSION

Though it is quite rare, vestibular schwannoma can be presented with contralateral facial pain. This unusual presentation seems to happen only in giant lesions. The reason is not completely clear, but it seems that the main reason should be displacement and distortion of the brainstem and less probably compression of the contralateral trigeminal nerve in Meckel’s cave by the large mass lesion. The best practice in these patients is removal of the tumour, although persistent contralateral pain after operation has been reported.
REFERENCES


FIGURE LEGENDS

Fig.1 - In her MRI with contrast a giant (45x44x42 mm) left CP angle nonhomogenous mass compatible with vestibular schwannoma is seen. The rostral and medial extension of the tumour and distortion of the brainstem is notable.

Fig.2 – Postoperatively, the tumour is totally removed and place of the craniectomy is seen. The brainstem seems to be returned to rather normal position.