뇌신경재활

게시일시 및 장소: 10월 19일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소: 10월 19일(토) 11:00-11:30 Room G(3F)

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UES balloon dilatation and dexamethasone treatment for dysphagia by a prepontine epidermoid cyst.

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Prepontine epidermoid cyst is a rare congenital tumor which arises during 3rd-5th week of embryogenesis due to incomplete separation of neuroectoderm. This is slow growing benign tumor with late presentation in adult life. The clinical symptoms depend on the location of the tumor.. Treatment usually involves surgery. But complete removal may be difficult if the cysts have surrounded or are very close to cranial nerves, arteries, or brain tissue.

In this case, 53-year-old man who was suffering from dysphagia and headache for 3months was diagnosed with prepontine epidermoid cyst on brain diffusion-weighted magnetic resonance imaging (DWI) (Figure 1-A). The patient's MRI showed about 1.5cm size irregular marginated DWI high signal lesion in pre-pontine cistern with pressure erosion of posterior surface of clivus. The patient had a videofluoroscopic swallow study (VFSS) and failed to swallow pudding because of limited dilatation of upper esophageal sphincter (UES) (Figure 2-A). Aspiration was evoked by an overflowing of pyriform sinus remnant. We performed videofluoroscopy-guided balloon dilatation of UES for four consecutive days. Checking images on fluoroscopy, 16-Fr Foley catheter with deflated balloon was inserted through the nasal cavity until the balloon part of catheter was estimated to be under lower margin of UES. Then balloon was gently inflated using 3mL of contrast media, and we pulled the inflated catheter slightly upward, locating the balloon at middle of UES. We kept balloon at UES for 30 seconds so the UES could be dilated mechanically. If the balloon was thrown upward from UES, we promptly deflated and repositioned the balloon at UES and continued the procedure. The procedure was done ten times every day. Moreover, the patient was administered intravenous dexamethasone 15mg and mannitol 400mg per day for seven days with tapering. The 2nd brain DWI after four sessions of UES balloon dilatation and seven administrations of dexamethasone did not showed the definite change of prepontine epidermoid cyst (Figure 1-B), but the patient could have semisolid foods and the swallowing difficulty have not recurred for more than 1 month (Figure 2-B). There is a limitation that we could not distinguish how the dysphagia was relieved; if it resulted from UES balloon dilatation or dexamethasone or mixed. The change of prepontine epidermoid cyst was not definite in DWI, but considering the low resolution of brain DWI, we could not completely exclude the change of prepontine epidermoid cyst by dexamethasone.

In conclusion, our case implies that the UES balloon dilatation and the dexamethasone could be a safe and effective treatment plan for the dysphagia by prepontine epidermoid cyst.

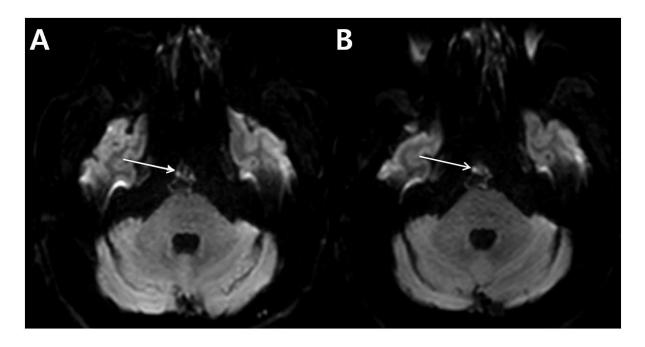


Figure 1. Prepontine epidermoid cyst (white arrow) on DWI before (A) and after (B) UES balloon dilatation and dexamethasone administration.

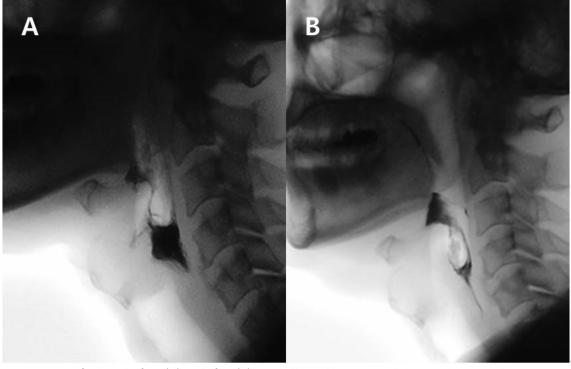


Figure 2. VFSS findings before (A) and after (B) UES balloon dilatation and dexamethasone administration.