Endobronchial ultrasound (EBUS) provides a minimally invasive means for physicians to see beyond the bronchial wall to diseased tissue, lymph nodes, or lesions outside of the bronchial airway.

Two patients diagnosed with obstructive hydrocephalus, one with a large cyst and the other with recurrent craniopharyngioma in the third ventricle, were applied to the EBUS system. RESULTS: In both patients, the EBUS system was applied safely, and lesions beyond the wall of ventricles or the cyst were visible. Color Doppler ultrasonography detected choroid plexus and internal cerebral veins. Furthermore, we performed real-time ultrasound-guided cyst puncture safely on the case with a large cyst. The most important precaution is that the curved portion of the EBUS system is too long to be bent within cerebral ventricles.

The new EBUS system with an ultrasonic convex probe is a novel and effectual device to perform intraventricular surgery [1)].

1)
Motegi H, Kobayashi H, Terasaka S, Yamaguchi S, Ishi Y, Ito Y, Houkin K. Application of endoscopic ultrasonography to intraventricular lesions. Acta Neurochir (Wien). 2015 Nov 6. [Epub ahead of print] PubMed PMID: 26542528.