Entrapment of the temporal horn, known as isolated lateral ventricle (ILV), is a rare type of noncommunicating focal hydrocephalus, and its standard treatment has not been established.

Hasegawa et al. report two cases of endoscopic surgery for ILV, and highlight the anatomical surgical nuances to avoid associated surgical risks.

The authors present two surgical cases with ILV treated by endoscopic surgery. The first patient with recurrent ILV, due to shunt malfunction, following the initial shunt placement for ILV. In the second patient, the ILV recurred due to choroid plexus inflammation caused by cryptococcal infection. Endoscopic temporal ventriculocisternostomy was effective in both cases. However, in the second case, the choroidal fissure was fenestrated, which led to cerebral infarction in the territory of the choroidal artery zone, attributed to damaging the branches of the choroidal segment of the anterior choroidal artery.

Endoscopic temporal ventriculocisternostomy is considered as a safe and less invasive procedure for treatment of symptomatic ILV. However, the technique is still associated with risks. To avoid complications, it is necessary to be familiar with the anatomy of the choroidal artery and the pertinent endoscopic intraventricular orientation. Addtitionally, sufficient experience is required before it can be recommended as the treatment of choice [1].

1)
Hasegawa T, Ogiwara T, Nagm A, Goto T, Aoyama T, Hongo K. Risks of endoscopic temporal ventriculocisternostomy for isolated lateral ventricle: Anatomical surgical nuances. World Neurosurg. 2017 Nov 15. pii: S1878-8750(17)31959-9. doi: 10.1016/j.wneu.2017.11.036. [Epub ahead of print] PubMed PMID: 29155114.