Non tumoral stenosis of the foramen of Monro is rare; pathogenic mechanisms remain a subject of debate. The narrowing can be unilateral causing monoventicular hydrocephalus, and exceptionally bilateral causing biventricular hydrocephalus. We present two cases of monoventricular hydrocephalus and two other cases of biventricular hydrocephalus. Clinically, all patients had the same signs as in common hydrocephalus. The CT scan and mainly the MRI allowed us to confirm the diagnosis and to avoid tumor obstruction of the foramen of Monro. With neuroendoscopy we were able to describe the foramen of Monro and perform a fenestration of the septum pellucidum. The prognosis is usually good