CYST OF THE SIXTH VENTRICLE (CAVUM OF VERGA)
SUCCESSFUL REMOVAL THROUGH TRANSVENTRICULAR APPROACH WITH NOTES ON EMBRYOLOGY AND HISTOPATHOLOGY*

MICHAEL SCOTT, M.D.

Department of Neurosurgery, Temple University School of Medicine and the Northeastern Hospital, Philadelphia, Pennsylvania

(Received for publication November 29, 1944)

THERE have been many reports of cysts of the septum pellucidum (5th ventricle), but descriptions of cysts of the ventricle of Verga (6th ventricle) are rare.

The cavity of the 6th ventricle was first described by Andrea Verga, an Italian anatomist, in 1851. Other names given for this cavity are: Verga’s ventricle, 6th ventricle, ventricle of Strambio, ventriculus fornicis, ventricularis triangularis and canal aqueduc. The reader is referred to Dandy’s article for an excellent historical summary.1

It is claimed that the combined cavity of the septum pellucidum and Verga is found as a small, non-pathogenic space in 2.5 per cent of brains examined at necropsy.1 Corning stated that in the adult an extension of this lumen as far caudally as the splenium is present in 3 per cent of all brains, and Verga observed that these cavities are found only in the human species.1,2,7

* Presented before the Philadelphia Neurological Society, November 1943.
The boundaries of the cavum of Verga are as follows: Anteriorly, the anterior limit of the fornix; superiorly, the body of the corpus callosum; posteriorly, the splenium of the corpus callosum; and inferiorly, the psalterium (lyra Davidis) and the hippocampal commissure. The cavity is also triangular when viewed laterally (Fig. 1) and flares out laterally on both sides with the curve of the fornix pushing in the lateral ventricles at the extreme lateral extensions (Fig. 2). The floor of the cavity rests on the tela choroidea (Fig. 3).

It is stated that either cavity may be present without the other, both may co-exist and be independent, or they may communicate with each other through openings in the fornix (Figs. 2 and 3). However, Van Wagenen and Aird believe that embryologically, the cavities are one and only chance variations in development may separate them, the cavum of Verga being simply the most posteriorly drawn-out portion of the cavity of the septum pellucidum.6

Wolf and Bamford published an excellent report on the embryology and histopathology of these cysts.7 They quote two main embryological theories of origin: One theory contends that the rapid widening of the lamina terminalis in the third fetal month produces internal tensions with the formation of a cavity within its substance (Streeter, G. Elliott, Smith, Marchand). The other theory, proposed by Corning, considers the cavity to be a portion of the inter-hemispheric fissure whose lateral boundaries are the medial aspects of the cerebral vesicles, ventral to the caudally extending corpus callosum. He contends that the cavity reaches back to the splenium in the seventh fetal month, the caudal end of the cavity being greatly obliterated by the union of the floor with the corpus callosum. This would explain the much higher frequency of a patent anterior cavum or cavum septi pellucidi without any cavum posticus or Vergae. Dejerine also links the development of these cavities with that of the inter-hemispheric fissure.7

There has been a controversy as to whether these cavities are true parts of the ventricular system. Dandy states that neither cavity is part of the ventricular system. He believes that the openings in the cyst that communi-