MR Imaging of Colloid Cysts of the Third Ventricle

We read with interest the article by Armao et al in the September 2000 issue of the AJNR (1). The authors described the postmortem MR imaging of a patient with a colloid cyst, demonstrating a central portion of the cyst with short-T1 and short-T2 characteristics, and a peripheral rim with long T1s and long T2s.

As early as 1990 (2), we described these two layers in colloid cysts of the third ventricle, both in vivo and in an autopsy specimen. At pathology, the outer component was composed of amorphous material and cellular debris and the inner component consisted of viscous material. Later, when preparing a CD-ROM on brain tumors for the series of the European Society of Neuroradiology (3), we reviewed the intraoperative videotape of one of the patients. We noted that the central part of the colloid cyst was filled with viscous but semiliquid material that easily drained after opening the cyst, while the outer part of the cyst was filled with more solid material and had to be removed by curetting. We suggested that the liquid versus solid state of the different parts of the cyst could explain the MR findings with the different sequences. The intraoperative and MR findings of our patients are very similar to those of the 3-minute boiled egg, as described in the article by Armao et al, and match the postmortem MR findings in their patient. We are pleased that the authors could provide further proof to confirm our earlier hypothesis.

Guy Wilms, M.D., Ph.D.
Department of Radiology
University Hospitals, Leuven, Belgium

References