Retraction of tumor capsule with Hemoclips

Technical note

W. BRADFORD DELONG, M.D.
Department of Surgery, University of California, San Francisco, California

✓ Tantalum clips with attached sutures are a useful aid in the retraction of a tumor capsule, cyst wall, and other similar structures. The method is especially useful when space for dissection is limited.

KEY WORDS  •  brain tumors  •  craniotomy  •  tantalum clips

Tantalum Hemoclips* may be used to retract a tumor capsule during surgical dissection. A clip is prepared by the surgical nurse, who ties a 4-0 silk suture to the clip with a simple overhand knot after the clip has been placed in the applier (Fig. 1).

The applier is then handed to the surgeon with the two ends of the suture trailing, and the clip is placed on the edge of the capsule. To accomplish retraction, a hemostat of appropriate weight is then clamped to the ends of the silk suture. As many clips as required may be applied to the edge of the capsule (Fig. 2).

This method of retraction frees both of the surgeon's hands and is quite efficient. The Hemoclip grips the tissue securely. Applying the clip and attached suture to the capsular edge is faster than placing a retracting stitch through the capsule. In fact, where space for dissection is relatively limited, as in the suprasellar region or the cerebellopontine angle, the surgeon may find it difficult to manipulate a needle with a retracting stitch through a tumor capsule. However, in such spots, a Hemoclip can be applied to the capsule with ease.

Structures other than tumor capsules also yield to this method of retraction; the clips with the silk suture attached can be applied through...

FIG. 2. Operative drawing. The clips and attached sutures apply traction to the capsule of a convexity meningioma, while the surgeon dissects the capsule from its bed. The tumor has been partially gutted. (For clarity, the wet rubber strips used to protect the exposed cortex are not shown.)

to dura, arachnoid, or cyst walls. If necessary, the clips can be removed at the end of the dissection with the use of the Weck Hemoclip remover.