

## Technique of localized en-bloc dissection along natural lines of cleavage in diabetic traction detachment

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### **Purpose:**

To demonstrate a little known surgical approach to diabetic traction detachment utilizing the natural lines of cleavage between neurosensory retina and proliferative tissue to achieve separation by blunt dissection with a simple curved spatula.

### **Introduction:**

Diabetic traction detachment frequently constitutes a formidable surgical challenge. Separating extensive fibrovascular membranes from the underlying retinal tissue is particularly difficult in cases with multiple paravascular adhesions. En-bloc dissection utilizing a bimanual technique with chandelier illumination and sharp dissection with intraocular scissors is a widely used method in these advanced cases. We would like to demonstrate an alternative method based on simple principles and even simpler instrumentation.

### **Methods:**

The fibrovascular plate is incised in the macular area and the natural lines of cleavage along the vascular arcades are probed and identified in a centrifugal fashion using a curved blunt spatula shaped like the tip of a ski. This special simple instrument is used in a sideways motion so as not to exert additional traction on the retina. With its roughened edges smaller fibrovascular bridges are separated directly. Hemorrhages are minimized since proliferative vessels are not cut sharply, but rather severed bluntly at the level of the retinal vessels where they are less prone to prolonged bleeding. Remaining major adhesions are initially left intact and can eventually be severed with scissors or the vitreous cutter to remove all fibrovascular tissue.

### **Conclusion:**

The advantages of this method include 1) relatively simple instrumentation, 2) reduced danger of retinal defects due to avoidance of iatrogenic traction and minimal use of sharp instruments, and 3) shortened surgical time since most adhesions can be severed bluntly in a sweeping motion.

