BACKGROUND

Bimanual manipulation improves the control of many steps during a vitrectomy. However, as one hand of the surgeon is usually occupied with holding the light probe an alternative illumination is needed. This can be achieved by two ways. First, the light pipe (most often with a shaft for increased stiffness) is used from outside as a scleral depression tool and light source at the same time (transillumination); second, chandelier lights are placed which gives more instrument options and a more conventional view of the vitreous and retina (endoillumination). In the latter case a second light source, the chandelier light, is needed.

We present a device that models a chandelier-like illumination with a standard light probe.

TECHNOLOGY

The device is a spacer partially encompassing the cannula of the vitrectomy light probe. It can be adjusted by the surgeon, so that the salient portion of the light probe cannula fits through the trocar just long enough to enable intraocular illumination. The spacer holds the light probe in place eliminating excessive slipping of the light probe into the eye. The orientation of the light can be managed by the surgeon or an assistant if needed.

ADVANTAGES

The device enables bimanual vitreoretinal surgery with a standard light probe.

- excellent intraocular illumination
- change from standard illumination to chandelier-like illumination in seconds
- no additional surgical skills necessary
- compatible with 23, 25, and 27 gauge...