following the fever was a possibility. Role of corticosteroids and immunosuppression in viral fever is controversial. As a result, he received oral steroids (1 mg/kg body wt) under cover of antivirals. There was no immediate improvement of the retinitis with the above treatment. However, there was no further worsening of the retinitis either. The lesions were self-limiting and took over six to eight weeks to resolve completely.

Retrospectively, the interval between the onset of visual symptoms and the systemic manifestations of chikungunya fever in our patient was three weeks. This delay favors the hypothesis that the ocular lesions could be an immune-mediated process rather than a direct viral infection. There may also be an aberrant immune response triggered by the virus resulting in development of autoantibodies against the retina. However, in our case, it is difficult to explain the PCR and ELISA positivity to herpes simplex virus and nonresponsiveness to antiviral treatment. As this is an isolated case report, it is difficult to postulate the mechanism involved in the development of retinitis.

This report highlights the findings and course of bilateral retinitis in a patient with chikungunya fever.

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**Illuminated curved 25-gauge vitrectomy probe for removal of subsclerotomy vitreous in vitreoretinal surgery**

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Incarceration of vitreous in sclerotomy sites during pars plana vitrectomy can lead to wound-related complications similar to vitreous incarceration in cataract surgery. We describe an illuminated curved 25-gauge vitrectomy probe for removing vitreous from sclerotomy sites. Polyester tubing is used to secure a fiber optic endoilluminator (0.5 mm) with the curved 25-gauge vitrector (0.5 mm). The resultant illuminated curved vitrector (20 G) has a diameter of 1.0 mm. It facilitates complete removal of vitreous around the internal sclerotomies under direct visualization in both phakic and pseudophakic eyes. The same was confirmed with ultrasound biomicroscopy of the sclerotomy sites. Curved vitrector reduces postoperative complications related to incarcerated vitreous in phakic and pseudophakic eyes and other sclerotomy-related wound complications.

**Key words:** Illuminated 25-gauge vitrectomy probe, pars plana vitrectomy, phakic, sclerotomy site

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Pars plana vitrectomy (PPV) can be complicated by development of peripheral retinal tears and subsequent retinal detachment. Following scleral penetration in PPV, vitreous incarceration is seen in all cases histopathologically. Often this is related to high flow rate of infusion fluid and associated increase in intraocular pressure.1

Various degrees of fibrous or fibrovascular ingrowth occurs at the sclerotomy site during wound healing. Degree and strength of fibrous ingrowth is a function of size of the sclerotomy, intraocular pressure at the time of sclerotomy closure, depth of incarceration of vitreous within the sclerotomy, age of the patient, hemorrhage in vitreous cavity, vascularization of the sclerotomy, race (blacks predisposed more than whites), and presence of posterior vitreous detachment.
Approximately 7% of vitrectomy cases develop peripheral retinal breaks postoperatively. Vitreous incarceration in the sclerotomy can lead to fibrovascular proliferation and anterior hyaloid proliferation in diabetic patients leading to recurrent vitreous hemorrhage. Complete shaving of the vitreous from the internal sclerotomy site significantly reduces vitreous incarceration. Existing instrumentation does not allow shaving of the vitreous around the internal sclerotomy in phakic patients.

We report a new technique that allows complete removal of incarcerated vitreous from sclerotomy sites in both phakic and pseudophakic eyes with an illuminated curved 25-gauge (25-G) vitrectomy probe through conventional sclerotomy for 20-gauge (20-G) instruments.

**Design**
The 25-gauge curved vitrectomy probe was a prototype manufactured by Bausch and Lomb (Rochester, NY). The radius of curvature at the shaft is 19.4 mm. The length of the probe is 25 mm with a uniform 25-G diameter (0.5 mm). Construction of the illuminated vitrectomy probe is similar to that described previously with a 20-G vitrectomy probe. A seamless strong polyester (polyethylene terephthalate) heat shrunk tubing (Advanced Polymers, Inc. Salem, NH) is used to secure a fiberoptic endoilluminator with a curved 25-G vitrector ([Fig. 1A, B, and 2A]: Vitrector and EM). The tubing has an internal diameter of 0.05 inches and thickness of 0.0005 inches. The resultant illuminated vitrector has a diameter of 1.0 mm (0.5 mm fiberoptic light source + 0.5 mm 25-G vitrector) [Fig. 2B]. The assembly is sterilized with gamma radiation, ethylene oxide or cold gas sterilization.

**Technique**
Standard surgical technique with microvitreoretinal blade is used to create the sclerotomies. The posterior PPV is completed using a 20-G vitrector. At the end of the procedure the 20-G cutter is replaced with the 25-G illuminated curved vitrector [Fig. 3]. The illumination of the probe facilitates visualization of the vitreous on the opposite vitreous base (180° away), while the curved design of the probe avoids crystalline lens touch [Figs. 4, 5]. This allows the surgeon to use the other hand to depress the opposite sclera, which enables viewing of the internal sclerotomy with its surrounding vitreous through the wide-angle lens system [Fig. 4]. Position of the endoilluminator tip from the vitrector port can be varied by a gentle sliding maneuver during the surgery to optimize the illumination of the incarcerated vitreous. The vitreous incarcerated in the internal sclerotomy opening is shaved completely under direct visualization. No leakage around the sclerotomy sites was noted with the assembly. Vitreous was removed completely from the sclerotomy sites uneventfully.

**Discussion**
Excision of the peripheral vitreous in a phakic eye with a clear lens is one of the most challenging tasks in vitreoretinal surgery. With the advent of the wide-angle viewing systems,
visualization of the peripheral vitreous base has improved significantly. The potential of iatrogenic trauma to the posterior lens surface by the straight vitrectomy probe restricts access to the peripheral vitreous near the sclerotomy site. A curved instrument allows access to the internal sclerotomy site without damaging the posterior lens surface [Fig. 5].

While using the curved or conventional vitrector, the surgeon holds the endoilluminator while the assistant depresses the sclera for view of the anterior vitreous. This makes the surgery assistant-dependent, time-consuming, and limits the dynamic viewing of the vitreous base with the endoilluminator.

The 20-G curved illuminated vitrector addresses the problems of illumination of the peripheral vitreous and safety of the crystalline lens. However, it requires a larger sclerotomy (18-G) than conventionally used, thereby increasing the risk of sclerotomy-related leakage and vitreous incarceration. Due to the smaller diameter of the shaft, the 25-G curved illuminated vitrector allows removal of the vitreous from the internal sclerotomy site through a conventional sclerotomy (20-G) while preserving the safety of the posterior lens surface.

Clinical examination as well as ultrasonographic examination confirmed this in both pseudophakic and phakic patients [Fig. 6A, B].

An illuminated sleeve (Synergetics, Inc. St. Charles, MO) that wraps around a straight 25-G vitrector provides the benefit of illuminated 25-G vitrector in a pseudophakic eye. However, the illuminated sleeve does not conform to the curved 25-G vitrector and cannot be used in phakic eyes without risk of lens touch.

Effective and complete removal of vitreous from the internal sclerotomy prevents postoperative complications associated with wound healing. Sabti et al., studied 22 eyes with ultrasound biomicroscopy (UBM) of which 11 underwent PPV with complete shaving of the vitreous from the internal sclerotomy site by indentation with a straight conventional vitrector, while 11 eyes in the control group underwent conventional PPV only. Complete vitreous shaving around the sclerotomy site significantly reduced vitreous incarceration. Removal of vitreous from the internal sclerotomy assumes added importance during implantation of intra-vitreal drug delivery systems where large sclerotomies are necessary to accommodate the size of the implant (2 to 4 mm).

In a prospective study utilizing UBM to study the internal sclerotomy site in diabetic patients undergoing vitrectomy, Bhende et al., noted that eyes with postoperative vitreous incarceration developed fibrovascular proliferation six months after surgery.

This is a known high-risk factor for recurrent vitreous hemorrhage after PPV in diabetics.

We have successfully employed this instrument in 100 complicated vitreoretinal procedures, of which 41 were phakic eyes. No lens-related complications occurred, though novice surgeons may experience a learning curve with the new device. In summary, the 25-G curved illuminated cutter combines the advantage of a self-illuminated vitrectomy probe and custom curved design that avoids crystalline lens touch. In addition, its usage through a standard 20-G sclerotomy in facilitating
The purpose of this article is to describe a rare benign tumor of nerve sheath origin arising from the eyelid in an elderly male. Local excision was done and histopathological examination revealed a neurothekeoma. Six months later the patient was doing well with no recurrence. The case was unique in that the patient was an elderly male while neurothekeoma is commonly seen on the face of young adults, especially females.

Key words: Eyelid, neurothekeoma, tumor

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Neurothekeoma is a rare benign soft tissue neoplasm of probable nerve sheath origin. They usually occur on the face and extremities of young adults and show a female preponderance. Only six cases of neurothekeoma have been reported till date. We present here a case of neurothekeoma on the eyelid in an elderly male.

Case Report

A 66-year-old man presented to the outpatient department with a painless swelling on the medial half of the right lower lid. It was of insidious onset, gradually increasing in size over the past eight years. Fine needle aspiration cytological examination of the lesion yielded only blood and diagnosis could not be established. He was a known diabetic and hypertensive, on treatment for the past eight years.

Examination of the lids and adnexa of the right eye revealed a single, soft, non-tender swelling measuring 2x1.9x1 cm [Fig. 1] with a lobulated surface, arising from the medial half of the lower lid. The lower lid margin along with the punctum was everted. The skin over the swelling showed prominent dilated veins. The palpebral conjunctiva in the region of the swelling showed keratinisation. Lid closure was adequate. No regional lymph nodes were palpable. Rest of the ocular examination was normal. The left eye was normal. The patient had watering of the eyes due to the exposure. The mass was causing a cosmetic deformity and so microsurgical excision with reconstruction of the lower lid was planned under local anesthesia.

A pentagon full-thickness resection of the tumor mass with microscopically clear margins on all sides was done and complete removal of vitreous from the internal sclerotomy prevents sclerotomy-related complications.

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