

miconazole.⁸ Triazole and itraconazole may have better efficacy with shorter treatment time.⁹

Dermatophyte infections can masquerade as bacterial, viral preseptal cellulites, or allergic dermatitis and should be considered in resistant cases. To our knowledge this is the first case of *T. interdigitale* infection causing preseptal cellulitis in an adult.

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Sir, Partial posterior capsulectomy through an anterior approach: an intraocular lens retaining technique in the management of presumed *Propionibacterium acnes* endophthalmitis

Delayed onset endophthalmitis caused by *Propionibacterium acnes* is a well-recognized complication of cataract surgery.^{1–3} Several reports have shown that intraocular antibiotic injection (IOAB), capsulectomy (partial or total) combined with vitrectomy, with or without intraocular lens (IOL) removal are associated with the least recurrence rates.^{4–6} The technique of performing partial posterior capsulectomy (PPC) through the anterior segment, without pars plana vitrectomy (PPV) has not been described. We herein describe a technique of performing PPC through the anterior segment using intraocular forceps and scissors.

Case report

An 82-year-old female was referred for cataract surgery. Best corrected visual acuities were 6/24 in both eyes. She underwent an uncomplicated superior clear corneal phacoemulsification with implantation of a multifocal silicone IOL (Allergan, SA 40N) in the right eye (RE). At the end of the surgery, subconjunctival injection of gentamicin and betnesol was administered. Postoperatively she was treated with topical antibiotics and steroids for 4 weeks and at discharge the vision was 6/6, N₁₀.

After 12 months, she presented with pain and photophobia of the RE. Visual acuity was 6/36, due to severe anterior chamber (AC) inflammation. There was no keratic precipitates, hypopyon, or intracapsular plaque, and the IOL was well-centered. The fundal reflex was bright with no evidence of vitritis. Late postoperative uveitis was diagnosed and topical steroids were prescribed. As the intraocular inflammation was not responding, a sub-Tenon's injection of methyl prednisolone acetate was administered, following which the vision transiently improved to 6/18. As the uveitis persisted, the possibility of delayed onset endophthalmitis was considered.

She underwent an AC paracentesis with intracameral injection of vancomycin (1 mg in 0.1 ml) and cefazidime (2 mg in 0.1 ml) in the operating room. Gram stain and culture of the AC aspirate showed no microorganisms. The intracameral injection was repeated 2 weeks later, with the same antibiotics injected in to the capsular bag. This procedure displaced the IOL, leaving the optic in the sulcus and haptics within the bag.

At 4 weeks following the second intracameral injection, she developed a white fluffy intracapsular plaque in the superonasal quadrant of the posterior capsule (Figure 1a). This plaque was not noted during previous examinations. Visual acuity was 6/24 and fluorescein angiogram confirmed cystoid macular oedema. As the chronic uveitis persisted we decided to surgically excise the capsular plaque.

Surgical technique

Under peribulbar anaesthesia, three clear corneal wounds (at 11, 3 and 8'o clock) were created using a 20-gauge microvitrectomy blade. The AC was maintained with an AC maintainer placed through the 8'o clock corneal section. A dispersive viscoelastic was

used to create a space between the IOL optic and the capsule. A 20-gauge end opening, intraocular microforceps, and intraocular scissors were introduced into this potential space through the 11 and 3'o clock corneal sections, respectively. The plaque was incised and then grasped with the microforceps held in one hand and cut with the intraocular scissors. By this manoeuvre, the plaque was 'dissected off', while retaining the inferior two-thirds of the posterior capsule. The IOL was left stable in the ciliary sulcus. The anterior vitreous phase remained intact during the procedure. The dissected plaque was removed through the corneal incision (Figure 1b). AC was reformed with balanced salt solution and stromal hydration was performed to the corneal wounds to obtain a self-sealing incision.

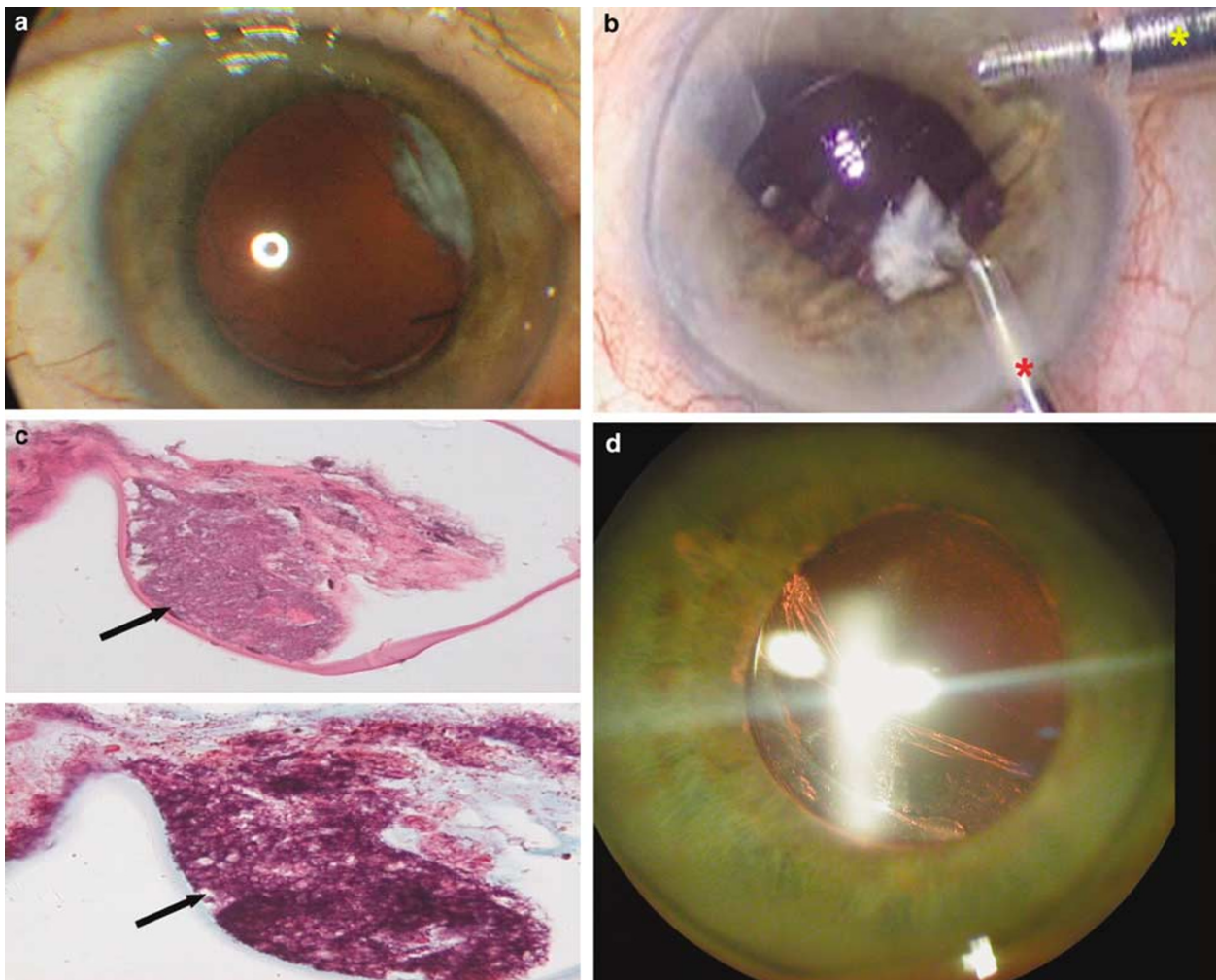


Figure 1 (a) Clinical photograph showing an intracapsular plaque in the right eye. (b) Intraoperative photograph showing the removal of the plaque with the intraocular forceps through the corneal wound (red asterisk). Note the anterior chamber maintainer (yellow asterisk). (c) Gram stain of the lens capsular remnants showing Gram-positive organisms (arrow), which is morphologically consistent with *Propionibacterium acnes* (original magnification, $\times 100$). (d) Postoperative photograph showing the residual healthy posterior capsule and a stable IOL.

Haematoxylin and eosin and gramTwort counter stain revealed a large colony of Gram-positive organism sequestered within the capsular material. The morphology was consistent with *P. acnes* (Figure 1c). At 4 weeks review, vision was 6/9, with a stable IOL in the ciliary sulcus and no evidence of intraocular inflammation (Figure 1d). At last follow-up, 13 months following the removal of the capsular plaque she has a vision of 6/12 with no evidence of recurrence of the infection.

Comment

P. acnes is a Gram-positive, anaerobic, bacillus and is a part of the normal eyelid and conjunctival flora.⁷ A characteristic clinical feature of *P. acnes* endophthalmitis is the presence of a white intracapsular plaque, shown to be composed of sequestered organisms within the capsular bag.

Diagnosis and management of *P. acnes* endophthalmitis can be difficult for several reasons: the intraocular inflammation may mimic sterile postoperative inflammation. The organism gets sequestered within the capsular bag and thrives in this anaerobic environment, isolated from the host defense mechanisms. Unlike the conventional management of endophthalmitis, intraocular antibiotics alone are not effective in the treatment of *P. acnes* endophthalmitis.^{1,4-6}

Although there are no randomized studies on the management of *P. acnes* endophthalmitis, there are several reports that have reviewed the management of this condition.³⁻⁶ The treatment options that have been described in the past include IOAB, PPV + IOAB, PPV + IOAB + PPC, and PPV + IOAB combined with total posterior capsulectomy. Clark *et al*⁴ reported the largest cohort of culture proven *P. acnes* endophthalmitis and showed that PPV + IOAB + PPC were usually successful on long-term follow-up. Although we were unable to culture *P. acnes*, the clinical features and histopathology were highly consistent with *P. acnes* capsular bag infection.

The technique of performing PPC through the anterior segment as a treatment modality of capsular bag infection has not been described. We chose not to perform PPV, as there was no evidence of posterior segment inflammation in our case. The advantages of the anterior approach are: that it does not require PPV and can be performed by an anterior segment surgeon through a sutureless, self-sealing corneal wound. The 20-gauge intraocular scissors and forceps can be introduced through a self-sealing corneal section and the bimanual dissection allows complete removal of the infective plaque, while retaining the remaining

healthy posterior capsule thereby avoiding IOL removal.

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