

Minimal Invasive Treatment of Epithelial Iris Cyst

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Abstract

To report on an iris cyst that was successfully treated with needle

aspiration combine with laser photocoagulation.

A 36-year-old woman presented with a two months history of foreign body sensation, blurred vision and minimal pain in the left eye.

Nine months previously, she had minimal blunt ocular trauma. The subsequent cyst was diagnosed as an epithelial inclusion cyst of the iris. Her vision was 20/40. We performed needle aspiration combine with laser photocoagulation. The treated lesion was completely removed. The patient's visual acuity recovered to 20/20. There was no recurrence as determined by slit lamp examination up to 18 months after treatment. The simple and minimal invasiveness treatment for

iris cyst by needle aspiration combine with laser photocoagulation can result in a satisfactory outcome without undertaking more invasive surgical treatments for epithelial iris cyst of the anterior chamber.

Key words: Epithelial iris cyst, needle aspiration and laser photocoagulation.

A 36-year-old woman presented with a two months history of foreign body sensation, blurred vision and minimal pain in the left eye. The patient had no history of intraocular surgery, or inflammation or pathologic data. She was healthy and was not using any systemic or topical medications. But she had minimal blunt ocular trauma 9 months previously.

Eye Examination

	Right eye	Left Eye
Visual Acuity (VA)	20/20	20/40+2
IOP (mmHg)	12	13
Cornea	WNL	No scar
Anterior Chamber & Iris	WNL	iris cyst 3 mm, cell 1+ (Fig1)
Lens	WNL	WNL
Fundus	WNL	WNL

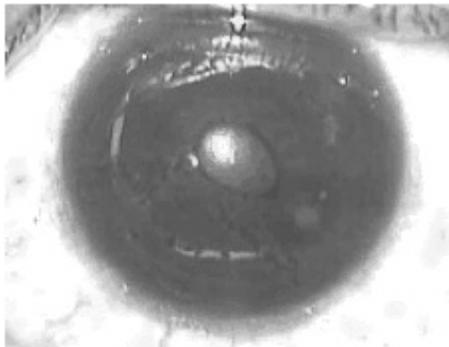


Figure 1. Show Anterior eye segment in the left eye: Inferotemporal iris cyst 3 mm occupying in the anterior chamber, the anterior wall of which was in contact with the corneal endothelium, no corneal scar respecting the visual axis, anterior chamber cell 1+.

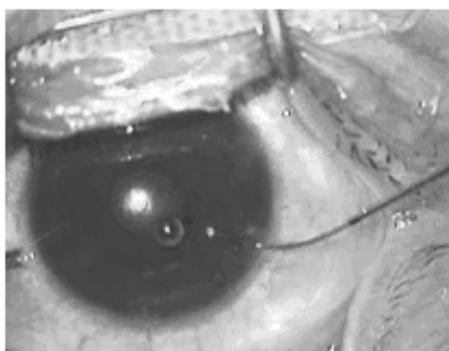


Figure 2. The procedure of Llaser photocoagulation probe (red illumination) to the wall of iris cyst, The bubble is the air in anterior chamber.

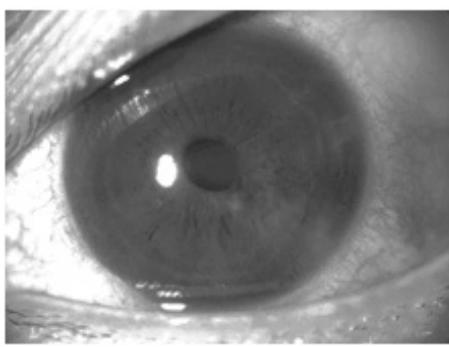


Figure 3. Slit lamp photography showing disappearance of the cyst in the left anterior chamber. Minimal iris contraction 7 days post operatively.

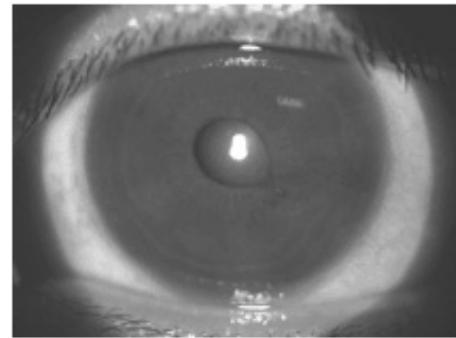


Figure 4. Slit lamp photography showing the cornea was clear and the anterior chamber was deep and clear. Atrophic iris and minimal oval contraction due to the residual iris scar 6 months post operatively.

The patient was treated with a 30-Gauge needle aspiration of the cyst at the temporal side of corneal after making a side puncture at the temporal side of the cornea limbus. We aspirated 0.03 ml, and cell cytology showed amorphous fluid with no cells.

Viscodissection of the cyst separated the cyst from the corneal endothelium. Then, laser photocoagulation was performed with an endolaser (Ultima 2000SE, Coherent. Inc., USA) at 200 mW (Fig. 2) and a total of 20 pulses in the epithelial wall with an endolaser probe.

Needle aspiration and laser treatment resulted in vanishing of the cyst and disappearance of the subject symptoms. Upon examination 7 days after treatment, Slit lamp photography showing disappearance of the cyst in the left anterior chamber (Fig. 3). The visual function was significantly improved, visual acuity was 20/20. The patient's left eye was medicated with 0.5% Moxifloxacin and 0.1% Fluorometholone eye drops every 6 hours for 2 weeks.

At the 6-month follow-up visit, the cornea was clear and the anterior chamber was deep and clear.

Atrophic iris and minimal oval contraction due to the residual iris scar (Fig. 4). The best-corrected visual acuity of the right eye was 20/20 with an intraocular pressure of 14 mm Hg. There was no evidence of recurrence of the epithelial cyst. And follow up to 18 months postoperatively, no evidence existed of the iris pigment cyst regrowth.

Histopathological findings: Squamous epithelial cells and some melanin laden cell suggestive of secondary iris cyst.

Discussion

Iris cysts has 2 types are primary or secondary iris cyst.¹⁻² A primary iris cyst is an epithelial-lined space which involves a portion of the iris and has no etiology.³ A secondary iris cyst is an epithelial-lined space that involves a portion of the iris and has an etiology, such as surgical trauma, secondary to an intraocular tumor, or parasites.²⁻³ Primary iris cysts usually no progressively increase in size or any complications, while secondary iris cysts may increase in size and complications such as uveitis or glaucoma.

A clinical diagnosis for this patient was epithelial inclusion cyst of the iris due to its origin in the iris, presence clear space between the cyst and corneal endothelium⁴ and 9 months previously history of ocular trauma. She had blurred vision and minimal pain and low grade inflammation in her left eye were the indications for therapy in this patient.

There are many modalities treatments for iris cyst.¹⁻⁶ The author selected the minimal invasiveness treatment for iris cyst by needle aspiration combine with laser photocoagulation modality for this patient. Under local anesthesia, peri-bulbar injection with

1% xylocaine; the patient was treated with a 30-Gauge needle aspiration of the cyst and then aspirated 0.03 ml. Viscodissection of the cyst separated the cyst from the corneal endothelium. Then, endolaser photocoagulation was performed and ensured complete destruction of the iris cyst, thus the treated was revealed atrophic and minimal contraction of inferotemporal iris. Immediately post operatively showed shrinkage of the iris cyst. Complete recovery, the visual function was significantly improved, visual acuity was 20/20 and no complications. And follow up to 18 months, there was no evidence of recurrence of the epithelial cyst.

In summary, the simple and minimal invasiveness treatment for iris cyst by needle aspiration combine with laser photocoagulation can result in a satisfactory outcome without undertaking more invasive surgical treatments and effectively treatments for epithelial iris cyst of the anterior chamber.

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รายงานผู้ป่วย: การรักษาผู้ป่วยถุงน้ำที่ม่านตาด้วยการผ่าตัดแพลเล็ก

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บทคัดย่อ

วัตถุประสงค์ : เพื่อนำเสนอผู้ป่วยถุงน้ำที่ม่านตาด้วยการผ่าตัดแพลเล็ก

วิธีการศึกษา: รายงานผู้ป่วย

สรุป: การรักษาผู้ป่วยถุงน้ำที่ม่านตาด้วยการผ่าตัดแพลเล็ก เป็นอีกทางเลือกที่ให้การรักษากรณีที่มีก้อนเนื้องอกประทეถุงน้ำที่ม่านตาโดยวิธีการดูดน้ำออก และจี้เลเซอร์

คำสำคัญ: Epithelial iris cyst, needle aspiration, laser photocoagulation

ผลการศึกษา: ผู้ป่วยหญิง อายุ 36 ปี มีประวัติอุบัติเหตุทางตาโดยการกระแทกของแข็ง 9 เดือนก่อนมาโรงพยาบาล และ 2 เดือน มีอาการระคายเคืองตา ตามัว และปวดตาเล็กน้อยในตาข้างซ้าย ผู้ป่วยมาโรงพยาบาลได้รับการวินิจฉัย มีถุงน้ำที่ม่านตาซ้าย มีค่าสายตา VA 20/20, 20/40 ขวาและซ้ายตามลำดับ ได้รับการรักษาการใช้เจมมูลน้ำและจี้เลเซอร์ ด้วยการผ่าตัดแพลเล็ก และได้รับการติดตามการรักษาต่อเนื่อง 18 เดือน พบว่าผู้ป่วยมีอาการเป็นปกติและการมองเห็น 20/20 ทั้งสองข้าง