

---

## CLINICAL CASE - PHOTO ESSAY

### PRIMARY CYST OF THE IRIS PIGMENT EPITHELIUM

*PATRICK DE POTTER, MD, PHD\**

---

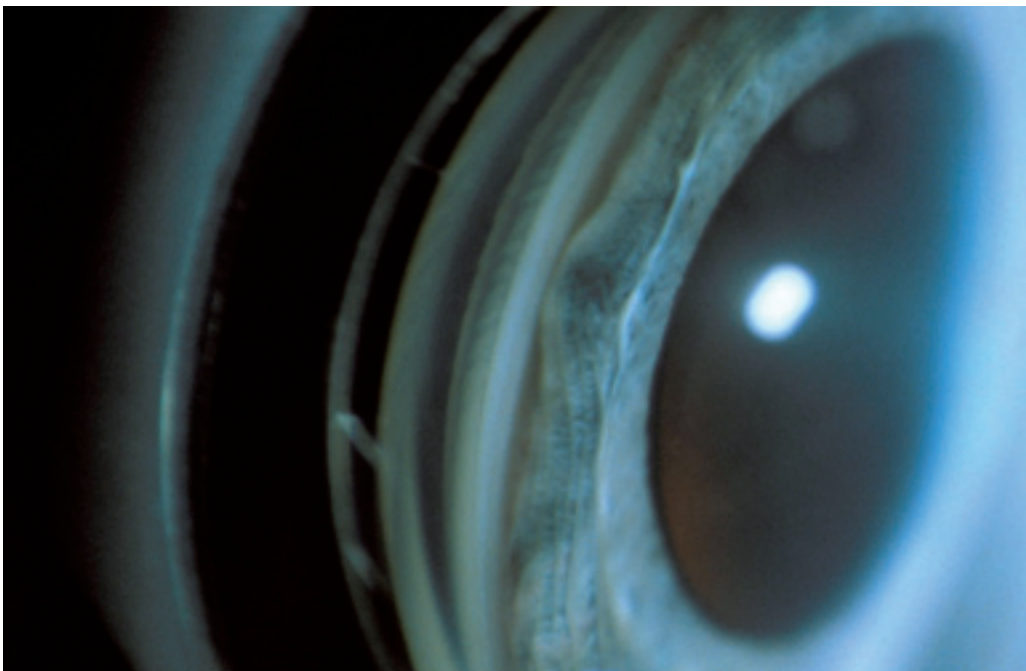
#### CASE REPORT

A 25 year old woman was found to have on routine microscopic examination of her right eye a deformation of the iris surface with bulging in the anterior chamber (Figure 1). No lesion was found after wide dilation of the pupil in primary gaze. By adjusting the slit lamp beam to the side and positioning the patient's eye in far gaze, a smooth slightly pigmented cystic lesion was found (Figure 2). Gonioscopy revealed angle structures obscured by the cyst and lack of lens changes. Ultrasound biomicroscopy (UBM) confirmed the presence of the single echo-free cyst behind the peripheral portion of

the iris with focal angle closure (Figure 3). Observation was recommended.

#### DISCUSSION

Iris pigment epithelial cysts can be classified by their location into pupillary, midzonal, peripheral (iridociliary) and free floating. The most common as the peripheral type is usually discovered in young asymptomatic adult women in the inferotemporal aspect of the iris. It can only be visualized on slit lamp biomicroscopy and gonioscopy with widely dilating pupil and adjusting the slit lamp beam to the side in far gaze. It usually appears as a brown in color,



*Fig. 1:* Gonioscopic view of the temporal aspect of the iris with anterior displacement of the stroma without iris architectural changes.

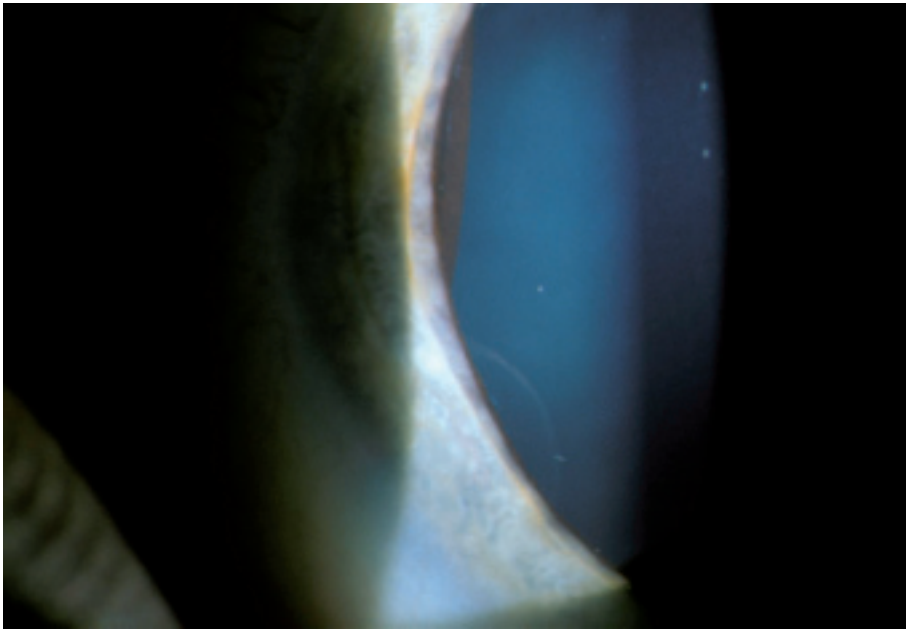


Fig. 2: Slit lamp view of the peripheral (iridociliary) cyst best seen after wide dilatation of the pupil and in far gaze. The cyst presents with smooth surface without lens opacities.

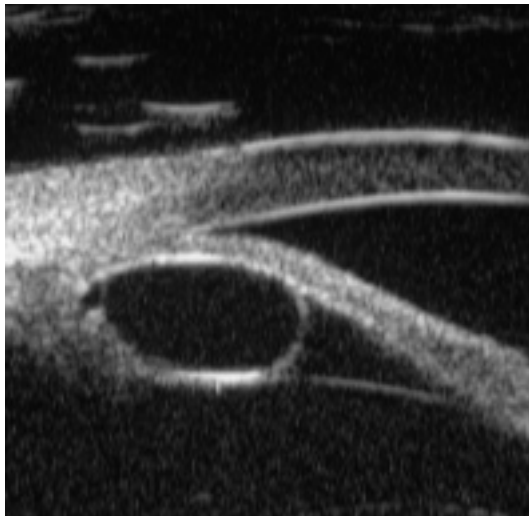


Fig. 3: Ultrasound biomicroscopy of the iridociliary cyst showing deformation of the peripheral portion of the iris, secondary focal angle closure and echo-free lumen.

round or oval, smooth cystic lesion that may transmit light with respect to the iris stromal surface. The diagnosis is ultimately confirmed by UBM for those that cannot be visualized directly. Studies with UBM have shown that the

number of peripheral IPE cysts detected by UBM is usually greater than expected based on clinical examination. Most cases have a benign clinical course. Recorded complications in the medical literature are uncommon and include corneal touch and focal cataract. No treatment is required.

#### REFERENCES

- (1) LOIS N.L., SHIELDS C.L., SHIELDS J.A., MERCADO G. – Primary cysts of the iris pigment epithelium. Clinical features and natural course in 234 patients. *Ophthalmology* 1998; 105: 1879-1885.

.....

\* From the Ocular Oncology Unit, Cliniques Universitaires St-Luc, Université Catholique de Louvain, Brussels, Belgium