

GLAUCOMA STORIES

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Table of Contents

1. Deep anterior chamber, yes indeed!	9
2. The sooner the better	23
3. Young people under pressure	41
4. More than just glaucoma	53
5. Indented iris	67
6. Details are in the angle	75
7. A specific etiology	87
8. Not a good mix	101
9. Head upside down	111
10. Myopia or glaucoma	123
11. Glaucoma as the final blow	133
12. Frozen eye	143
13. Did you say normal?	155
14. Rare but intelligent	169
15. An ice storm	179
16. Trivial	195
17. So young	207

1

Deep anterior chamber...
yes indeed!

Case report

Mrs. B, 41 year old was referred by a physician colleague for bilateral ocular hypertension, associated with the presence of anterior synechiae revealed upon gonioscopic examination. In his mail, he writes that he suspects a primary bilateral angle closure glaucoma, but is surprised by the significant deepness of the anterior chamber.

Mrs. B had history of asthma, which appeared a few year before. She was treated with inhaled corticosteroids when symptoms appeared.

On examination visual acuity is 20/40 in the right eye and 20/20 in the left eye with a correction of -2.50 diopters in both eyes. Intraocular pressure without treatment is 32 mmHg on the right and 18 mmHg on the left without treatment.

The gonioscopic examination reveals numerous peripheral anterior synechiae on the right and only a few on the left with deep anterior chambers in the center (Figure 1).

Multiple choice question

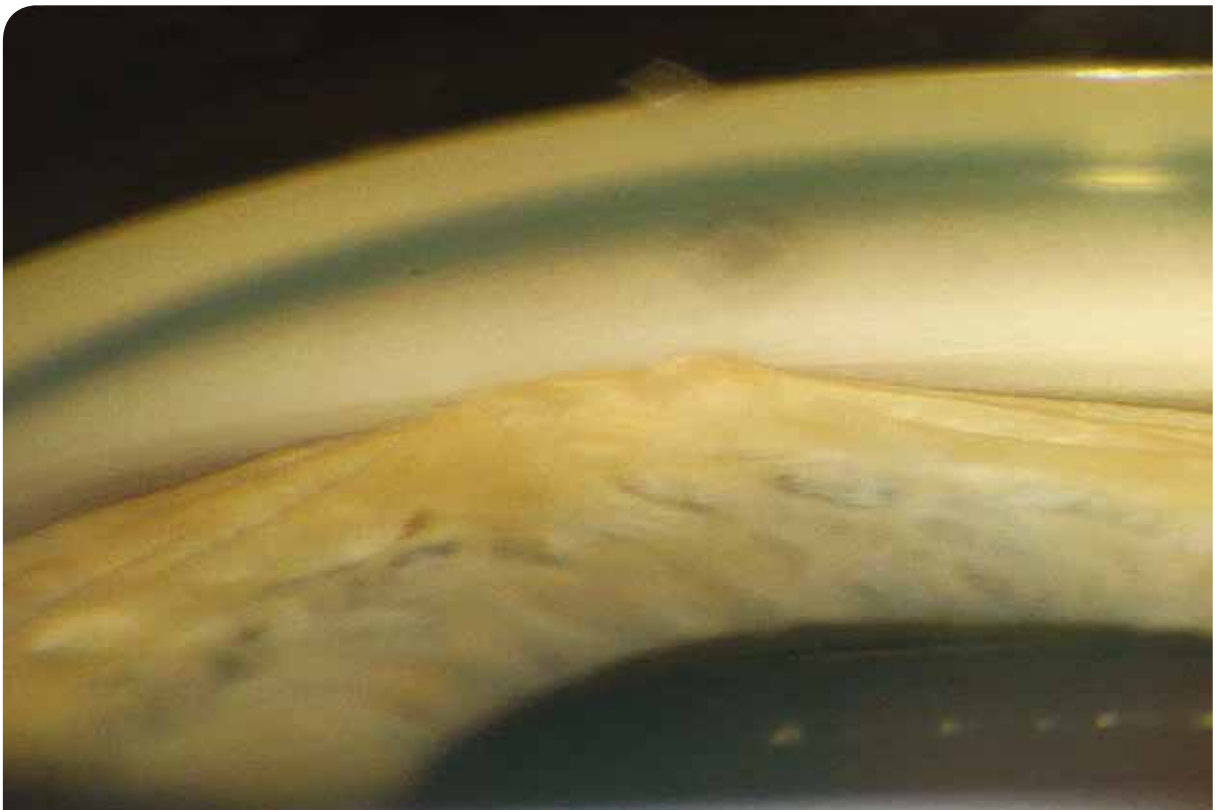


Figure 1: Peripheral anterior synechiae of the right eye.

What condition can explain the presence of anterior synechiae in this patient (one correct answer)

- A. Primary angle-closure glaucoma
- B. Chronic anterior uveitis
- C. Neovascular glaucoma
- D. Pupillary seclusion
- E. Plateau iris syndrome

Answer to the MCQ on page 21

Complete case report and answer to the question

On examination visual acuity is 20/40 in the right and 20/20 in the left eye with a correction of -2.50 diopters in both eyes.

Intraocular pressure without treatment is 32 mmHg on the right and 18 mmHg on the left without treatment.

The examination of the anterior segment reveals the presence of some bilateral granulomatous retro-descemetometric precipitates. The anterior chambers are quiet and deep. Numerous irido-crystalline synechiae are present on the right and very minimal on the left (Figure 2).



Figure 2: Numerous irido-crystalline synechiae.

A highly magnified examination shows the presence of nodules on the iris margin (Koepple nodules) and on the iris stroma (Busacca nodules) (Figures 3 and 4).

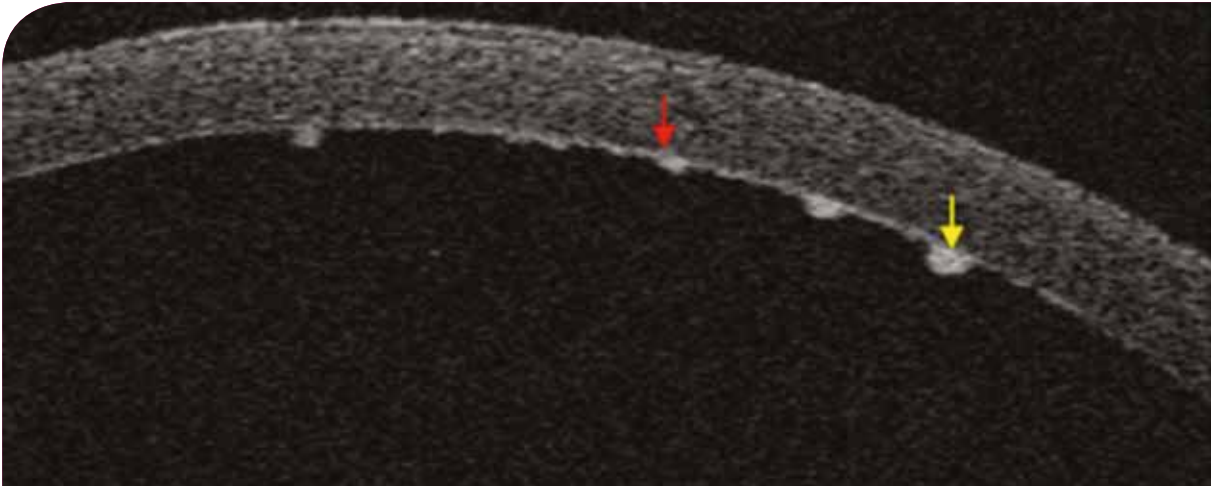


Figure 3: Iris nodules.

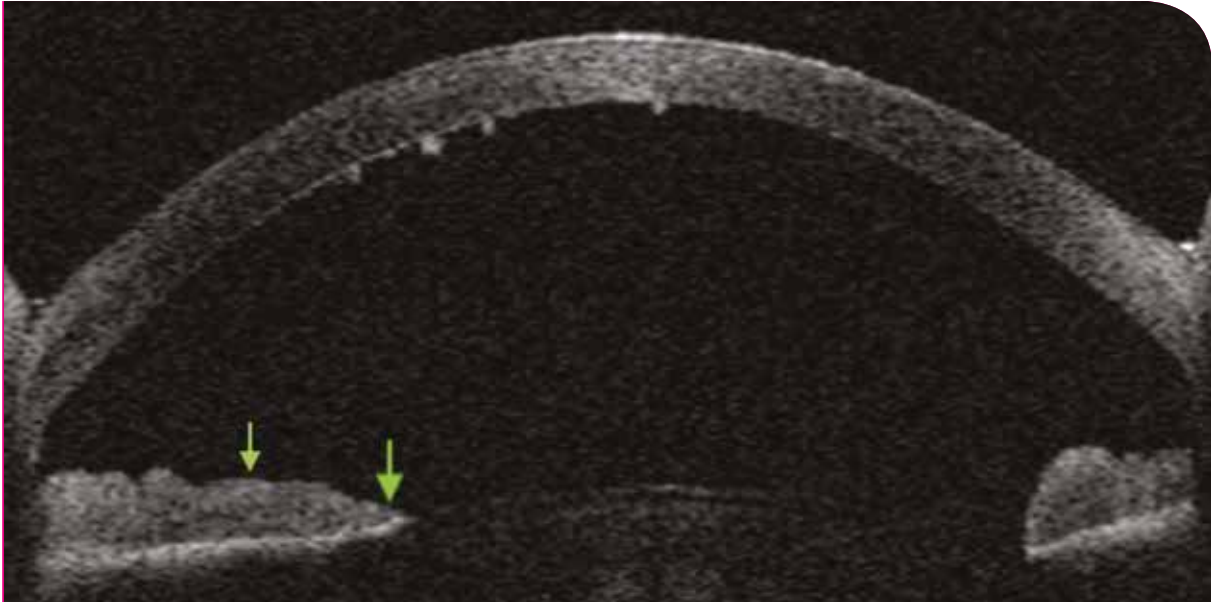


Figure 4: Retro-descemetometric precipitates in OCT.

The gonioscopic examination reveals fairly extended peripheral anterior synechiae, numerous on the right and few on the left.

These synechiae exceed the anterior limit of the trabecular meshwork, concealing half of the its circumference on the right (Figure 5).

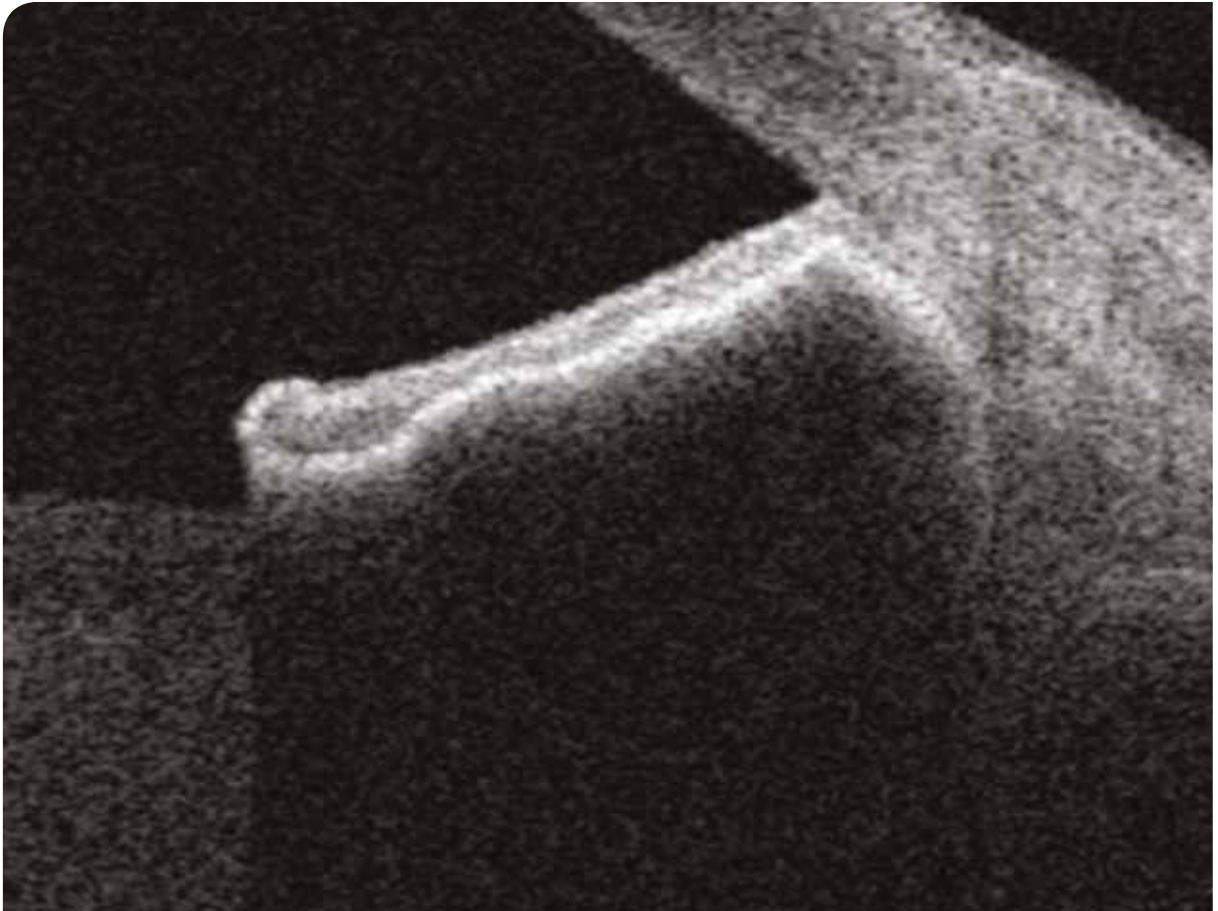


Figure 5: Cross-section of a peripheral anterior synechia.