BLACK INTRAOCULAR LENS:
ANOTHER COSMETIC APPROACH TO LEUKOCORIA


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The authors have no financial interests
CASE REPORT

- 32-year-old woman;

- Undesired cosmetic appearance of her amblyopic left eye due to:
  - Traumatic cataract and total retinal detachment during childhood

- Visual acuity:
  - OE: no light perception

- External examination:
  - OE: leukocoria and exotropia
CASE REPORT

- **Biomicroscopy:**
  
  - OD: normal
  
  - OE:
    
    - Clear cornea
    - Normal iris
    - White pupillary reflex
    - Subluxated white cataract

- **A-scan Ultrasonography:**
  
  - Fibrotic retinal detachment
CASE REPORT

Discussion of all the therapeutic options
Informed consent

COSMETIC SURGERY:
STRABISMUS + LEUKOCORIA CORRECTION
CASE REPORT

- Recession of lateral rectus muscle and resection of medial rectus muscle
- Retropupillary implantation of an Artisan pupil occluder without cataract extraction

- Artisan Pupil Occluder
- Black
- Flexible Iris Claw
- Overall diameter: 8.5 cm
- Optic Diameter: 5.4 mm
CASE REPORT

Immediate postoperative course:

• Uneventful

Two weeks later:

• Dislocation of one of the lens haptics and posterior subluxation
• Increase of the cataract subluxation

RE-INTERVENTION
CASE REPORT

- Pupil occludor extraction
- Intracapsular cataract extraction
- Reposition of pupil occludor over the iris
Immediate postoperative course:
• Uneventful

Six months later:
• Without complications
• Exotropia was corrected
• Pupil occluder remained well centered
• Significant improvement in the patient’s self-image

RESULTS

BLACK INTRAOCULAR LENS:
ANOTHER COSMETIC APPROACH TO LEUKOCORIA
CLASSIC APPROACH TO LEUKOCORIA:

1. Cosmetic contact lenses:
   - Uncomfortable or cosmetically unaccepted

2. Corneal Tattooing:
   - May cause toxic effects, corneal ulceration, mild keratitis or iridocyclitis
   - Residual white reflex

3. Simple crystalline lens extraction:
   - Fibrotic retinal detachment may cause residual white reflex

4. Implantation of a standard Black Intra Ocular Lens:
   - Implicates capsular bag preservation or scleral sutures
OUR APPROACH TO LEUKOCORIA:

1) Retropupillary implantation of an Artisan Pupil Occluder without cataract extraction

- Pupil occlusion in cases of intractable diplopia
- Phakic and aphakic eyes (due to the vaulted configuration)
OUR APPROACH TO LEUKOCORIA:
1) Retropupillary implantation of an Artisan Pupil Occluder without cataract extraction

COMPLICATION

2) Intracapsular cataract extraction and reposition of Pupil Occludor over the iris

✓ In our experience: due to the features of this type of lens it’s not very suitable to the retropupillary enclavation
CONCLUSION

☑️ Despite the need of re-intervention, the final cosmetic appearance was excellent. So, in our experience:

☑️ In cases of leukocoria the use of the Artisan lens as a pupil occluder, over the iris, can be a cosmetic correction alternative to the classic treatment.
REFERENCES:

1. Alio J. et al. Corneal Tattooing (keratopigmentation) with new mineral micronised pigments to restore cosmetic appearance in severely impaired eyes.


THANK YOU FOR YOUR ATTENTION