Abnormalities of Pupil Structure

(Other than aniridia)

Abnormal Pupil Structure Abnormalities:

1. **Abnormal Pupil…**
   - Size
     - Congenital miosis (microcorea)
     - Due to dilator absence/malformation, or fibrous contraction
     - Associated with multiple congenital ocular abnormalities
   - Congenital mydriasis
     - Probably part of the aniridia spectrum

2. **Abnormal Pupil…**
   - Shape
     - Dyscoria = congenital misshapen pupil
     - e.g., coloboma

3. **Abnormal Pupil…**
   - Location
     - Corectopia = displacement of pupil
     - Slight (.5mm) inferonasal deviation is normal
     - Deviation up to 1mm considered OK
     - Corectopia associated with lens subluxation = ectopia lentis et pupillae
     - Bilateral disease
     - Pupil and lens displaced in opposite directions
     - Pupils often dyscoric

4. **Abnormal Pupil…**
   - Number
     - Polycoria = >1 pupil
     - True polycoria requires that each pupil has a sphincter muscle (is exceedingly rare)
     - Pseudopolycoria accounts for the vast majority of cases

(Other than aniridia)
Abnormalities of Pupil Structure

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Abnormal Pupil...Size

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Pupil structure abnormality

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Pupil structure abnormality

Abnormal Pupil...Location

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*Corectopia* = displacement of pupil
--Slight (.5mm) inferonasal deviation is *normal*
--Deviation up to 1mm considered OK
Corectopia associated with lens subluxation = *ectopia lentis et pupillae*
   a) Bilateral disease
   b) Pupil and lens displaced in opposite directions
   c) Pupils often dyscoric

**Abnormal Pupil...Number**
--*Polycoria* = >1 pupil
--*True polycoria* requires that each pupil has a...sphincter muscle (is exceedingly rare)
--*Pseudopolycoria* accounts for the vast majority of cases
Abnormalities of Pupil Structure
(Other than aniridia)

Abnormal Pupil...Size
1) Congenital miosis (*microcoria*)
   --Due to dilator absence/malformation, or fibrous contraction
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2) Congenital mydriasis
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Pupil structure abnormality

What directions are the pupils and lenses displaced?

Microspherophakia

Slit-like
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