RETINOSCHISIS AND RETINAL DETACHMENT
AVOID MISMANAGEMENT

BY

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T = Full-thickness retinal tear with retinal detachment
a = anterior leaf of retinoschisis
p = posterior leaf
ta = anterior leaf holes
tp = posterior leaf breaks
cd = cyst in old detach.
mc = macular cyst
RETINOSCHISIS
AETIOLOGY AND TYPES

- Sex-linked (or X-linked), commonly called Juvenile retinoschisis
  Males:
  Related to vitreo-tapeto-retinal degeneration with macular aberration

- Degenerative
  Both sexes:
  Juvenile and Senile degenerative retinoschisis
  Related to typical cystoid degeneration, and reticular cystoid degeneration

Sex linked or X-linked (or Juvenile retinoschisis)
Macular aberration (macular schisis)

DEGENERATIVE RETINOSCHISIS

**Juvenile & senile**

**CLINICAL STUDY**

Incidence

- All ages ……3.7%
- 40 years + …… 7%
- Bilateral ……………………………………….. 82%
- Inferior temporal …………………………….. 72%
- Extended post – equatorially……………… 42%
- Ratio schisis to detach. in general population…. 53:1
**HISTOPATHOLOGY**

**Sex–linked** .......... Splitting in the nerve fiber layer

**Senile**  
- Flat .......... related to typical cystoid degeneration
- Bullous .......... related to reticular cystoid degeneration

Robert Y. Foos 1980  
Personal communication
The Two types of degenerative retinoschisis, may be present in the same eye

- **Flat + Bullous**
- **Flat**

**COURSE AND PROGNOSIS**

- **Sex-linked (X-linked)** .... deterioration

- **Degenerative (Juvenile or Senile)**
  - **Flat**: stationary or very slowly progressive, usually not complicated with ret. detachment, (related to typical cystoid degeneration)
  - **Bullous**: usually progressive (dissecting), related to reticular cystoid degeneration, likely to develop posterior leaf breaks and may be complicated with retinal detachment
Degenerative bullous retinoschisis- with ret. det. due to outer wall holes.

Robert Y. Foos 1980
Personal communication
INCIDENCE OF RETINAL DETACHMENT

- Higher in **bullous** degenerative retinoschisis due to the thin outer leaf, where holes are common, as a result of the underlying reticular cystoid degeneration.

- This is not the case with the **flat** type of degenerative retinoschisis, where the outer wall is thick and outer-leaf holes are much less common and therefore ret. Detachment is very rare.

TREATMENT

*Degenerative Retinoschisis (Juvenile & Senile) bullous retinoschisis only*

- Surface diathermy
- Evacuation of cyst fluid and diathermy
- Surface diathermy and scleral buckling
- Photocoagulation
- Cryocoagulation
- Treatment of associated retinal detachment
Bullous retinoschisis treated by cryothermy

Bullous retinoschisis complicated by old standing ret. detachment OD
Bullous retinoschisis OS treated by laser PC for prophylaxis
ASSOCIATED RETINAL DETACHMENT

Total number of retinoschisis cases.................119
Detachment related to retinoschisis...............19
Detachment unrelated to retinoschisis............11
Total.................................................................30

Incidence of detachment.....................................25%
Detachment of the schitic and nonschitic retina
RETINOSCHISIS AND RETINAL DETACHMENT

Retinal detachment complicating retinoschisis has characteristics of its own:

1. The clinical appearance of the schitic & non-schitic detached retina is different and denotes the combination of a long-standing retinoschisis recently complicated by retinal detachment of the schitic and non-schitic parts of the retina.

2. Detachment due to outer wall holes moves very slowly, the SRF derived from the cyst cavity is very viscous.

3. However, more commonly holes in both walls allow liquid vitreous access to the subretinal space leading to more rapid development of retinal detachment of both the schitic and non-schitic part of the retina.

4. Diagnosis can be difficult & therefore, management can be delayed.

RETINOSCHISIS AND RETINAL DETACHMENT MANAGEMENT

5. Posterior leaf breaks are not easy to find and are often missed.

6. A wider physical treatment area is necessary and indentation and cryoapplication can help identify posterior leaf breaks. (Over treatment can cause secondary breaks).

7. Drainage needs care and time and should be as complete as possible in order to drain the subretinal fluid as well as the retinoschisis cavity.

8. Usually a broad equatorial buckle is needed to support the schitic part of the retinal detachment and to cover possibly missed posterior leaf breaks.