SUMMARY & CONCLUSION

Retinal detachment is basically not a commen disease. The incidence in the normal population ranges from 0.01% to 0.05%.

The chances of a retinal detachment are higher in risk patients, as in :

- Aphakia
- Myopia
- Vitreous loss
- After postoperative capsulotomy
- Retinal detachment in the fellow eye

In the literature there are many reports about the incidence of aphakic retinal detachment depending on the refractive error, the technique of cataract extraction and on the surgeons skill, for example viteous loss.

In the last few years there has been an increased acceptance of intraocular lenses, however the frequency of retinal detachment was not more frequent than the rate of retinal detachment in aphakia after intracapsular or extracapsular extractions.

The purpose of this work is to compare a group of pseudophakic detachment managed by the so called "minimal retinal detachment" procedures without cerclage and drainage of the subretinal fluid with the conventional method of detachment surgery mentioned in the literature .

Problems prohibiting adequate fundus visualisation for the search of the offending break were identified:

- Pseudophakoes related problems ; reflexes, decentration
- Poor pupillary dilatation ; adhesions, miotics, sutures
- Capsular opacification ; secondary cataract, stress lines
- Media opacities

70 pseudophakic detachment were classified according to ; the surgical approach of cataract extraction and the type of implant into 3 groups :

- 18 detachments after ICCE and implantation of anterior chamber lens.
- 20 detachments after ICCE and implantation of iris fixated lens.
- 32 detachments after ECCE and implantation of posterior chamber lens .

Myopia was common in over 95% of detachments.

Managing these pseudophakic detachments were as follows:

- 68 eyes (98%) with a primary localized buckling technique, using a segmental buckling without drainage or temporary balloon.
- 1 eye (1%) recieved primary vitrectomy and buckling procedures.
- 1 eye (1%) combined buckling and drainage of subretinal fluid.

The redetachment were also managed with buckle modification without drainage, one eye required a vitrectomy for progressing PVR, cerclage and silicon oil instillation.

Mild postoperative complications as corneal oedema, secondary glaucoma, uveitis, adhesions with the implant and implant dislocation were within the averge rates described by other authors. Drainage related complications were absent in this group.

The pseudophakic detachment achieved an anatomical as well as functional success rate equivalent to the average success rate of other centers.

Failures were encountered because of progressive PVR which is considered inoperable with conventional buckle procedure.

Pseudophakia has been often considered responsible for high incidence of detachments as well as for the poor visibility of the fundus periphery.

The true culprits, however, are :

- Thorough fundus examination in myopia.
- The fellow eye with detachment.
- Attention should be paid to the quality and safty of cataract surgery especialy after complicated procedures and aborting lens implantation.
- Lastly after capsulotomy

All will contribute to the prevention of these detachments.

The criteria identified in this study allow me to draw several conclusions:

1. There is no doubt that pseudophakic detachments are becoming more common than the aphakic variety, in the states and western countries,and this is not surprising because of the unique advantages of IOLs implanted for rehabilitation of aphakia.

2. Extracapsular cataract extraction and implantation of posterior chamber lenses statistically is the procedure of choice in all patients undergoing cataract extraction (Stark, 1987), and especially those who are at risk for retinal detachment (Cousins et al., 1986), and these eyes have a prognosis as good as that of an aphakic eye. From the available literature and in terms of complications after pseudophakia (F.D.A. Stark, 1987), the posterior chamber lens is considered the safest device for the correction of aphakia.

3. The role of the posterior capsule as a barrier in reducing the incidence of retinal detachment must be considered. Clayman et al. (1981), Percival et al. (1983) demonstrated a reduced incidence of retinal detachment in eyes undergoing intraocular lens placement or extracapsular cataract surgery, or both. The removal of this barrier whether accidentaly or with YAG laser,will potentially places the eye at higher risk for the development of detachement.

4. From the available literature and from this study of pseudophakic retinal detachment, it was found that the detachments associated with posterior chamber implants were significantly less extensive and there was a trend to less macular involvement with a better preoperative visual acuity and a less significant preoperative intraocular inflammation than in any other type of implant. Similarly the anatomical and functional success rates were significantly better in the posterior chamber lens group than in the anterior chamber lens series.

5. In eyes with planned cataract extractions, in the presence of high risk factors, e.g. myopia, history of detachment in the fellow eye, it seems that the extraction technique influences the incidence and the repair success rate.

   -Pischel et al. (1977) found a higher incidence of recurrent detachment after cataract extraction of 15 %.

   -Smiddy et al. (1988) found a low rate, less than 3% of recurrent retinal tears or retinal detachment after cataract extraction in patients who had undergone previous scleral buckling procedures for retinal detachment repair.

   This significant different incidence between the two studies was influenced by the extraction technique, the former was ICCE and the latter ECCE. Thus one can assume that the ECCE in high-risk eyes is undoubtedly the method of choice.

6. In conclusion, the implantation of posterior chamber lenses after an uneventful extracapsular procedure, if associated with subsequent retinal detachment, has a good prognosis for the final anatomical and functional results compared to other implants. In high risk eyes we recommend the ECCE technique and when an IOL is considered, then only in planned uneventful extractions (Wilkinson, 1986).

7. An evaluation and comparison of the described surgical technique with other available techniques from the literature gave the same anatomical and functional results, confirming that pseudophakic detachments have a good prognosis even with minimal surgery.