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CAMBRIDGE SOCIETY FOR THE APPLICATION OF RESEARCH

# 'The Eyes Have it!'

## Surgery and Repair on the Human Eye

Professor Adrian K Dixon Mr Martin P Snead MD FRCS FRCOphth, Consultant Ophthalmic Surgeon, Vitreoretinal Service, Addenbrooke's Hospital

Monday 13<sup>th</sup> October, 2003: **7.30 p.m. - 9.00 p.m.** *The Wolfson Lecture Theatre, Churchill College, Cambridge* 

Chair: tbc
Vote of Thanks: tbc

### Martin Snead writes.....

Rhegmatogenous retinal detachment (retinal detachment due to holes or tears in the retina) typically presents with sudden visual loss and is the commonest form of retinal detachment affecting 1:10,000 of the population per year and generating approximately 5,800 new cases per year for the UK alone. Modern microsurgical techniques and primary repair in specialised units mean that surgical repair can be attempted in most cases, but there remains a 15-20% primary surgical failure rate across the UK. Even with successful anatomical repair severe residual visual loss as a result of poor functional recovery can remain presenting a serious visual burden for a population of patients drawn principally from the working age group. Extrapolation of blind registration data suggests that retinal detachment contributes approximately 450 new blind registrations per year for the UK alone.

Of key significance and in contrast to many other retinal blinding disorders, blindness through retinal detachment in most cases is potentially avoidable and the situation could be much improved if a rationale for the prediction and prevention of retinal detachment could be

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developed. Treatments to produce a biological retinal adhesion are now available in the form of argon laser or cryoretinopexy but effective prophylaxis has been frustrated by a lack of understanding of the factors governing the various types of retinal tear formation and those factors influencing progression to retinal detachment. A recent Cochrane review has highlighted both the deficiency of published trials assessing effectiveness of prophylaxis and that some current recommendations based upon a consensus of expert opinion contradict what little published evidence exists. Studies assessing the effectiveness of prophylaxis have therefore been recommended and particularly for those patients at high risk of retinal detachment. This presentation describes our current work attempting to address these fundamental issues.

#### **About the speaker:**

Mr Martin Snead was appointed as Consultant Ophthalmic Surgeon at Addenbrookes Hospital in 1996. He has a research interest in vitreoretinal disorders, inherited vitreoretinopathies, ocular trauma and retinal detachment repair. The Vitreoretinal Service at Addenbrookes Hospital provides a regional and national tertiary referral service for inherited vitreoretinopathies and to the best of our knowledge is the only such centre in the UK. Seven hundred vitreoretinal surgical procedures are carried out per annum and one hundred and ninety families with inherited vitreoretinopathies are participating in the research effort.

#### **Organising Secretary's Notes:**

When I started work in my teens as a scientific assistant for the ARC (I worked for Joe Chatt and John Postgate in NitFix), I started my training with Ray Richards. We worked on organometallic complexes, which we made and manipulated in high vacuum apparatus. We all wore armoured safety glasses (other delightful materials included fuming sulphuric acid and molten sodium – but not usually in the same vessel!) and Ray made a great impression on me by saying, when he spotted me without the requisite eyewear

### 'there's no such thing as a blind chemist..........'

Which about says it; our eyes really do have it!

In fact, your Society already owes Martin Snead a considerable debt - he repaired the sight of one of our Council Members!

The first of a very interesting year's lectures!

#### **Richard Freeman**

CSAR Organising Secretary