

## **RETINOPATHY OF PREMATUREITY – STAGE III AND BEYOND**

### **Background**

Retinopathy of Prematurity (ROP) is an important cause of morbidity, including blindness, in very premature infants.

An important US multicentre study reported ROP of any stage in nearly 66% of infants with birthweight <1250g, stage III in 12% and “threshold disease” (stage III ROP involving 5 or more continuous or 8 or more cumulative clock hours with “plus” disease, which has a 50% chance of poor visual outcome) in 6% (Arch Ophthalmol 1988;106:471).

The last national New Zealand audit of ROP (in infants <1500g) was in 1986. Since then there has been considerable improvements in survival of the most premature infants (approximately 85% of <1000g infants survived in 1996 compared to 66% in 1989) and cryotherapy has become available to treat threshold disease (reducing adverse visual outcomes by nearly 50%). Overseas data give conflicting information of the impact of improved survival of these smallest infants on the incidence of ROP. Whilst studies from Australia have suggested that the incidence of blindness from ROP has fallen, one study from Manchester, UK, reported it had increased greatly.

### **Objectives**

To assess:

1. the annual incidence of severe (Stage III and beyond) ROP in New Zealand
2. regional differences in the incidence of Stage III ROP
3. what proportion of eyes (and infants) reaching Stage III ROP receive cryotherapy or laser therapy and what is the outcome (anatomic and visual) of treated and untreated eyes.

### **Case definition**

**Any infant newly diagnosed with Stage III (or beyond) ROP in either eye by an ophthalmologist following the recommendations of the Committee for the Classification of Retinopathy of Prematurity (Pediatrics 1984;74:127-33).**

### **Reporting instructions**

Please report any case presenting, or first meeting these criteria in the previous month. Most neonatal units have an “Eye Book” in which are recorded the results of retinal assessments.

Cases reported to the NZPSU should be recorded as such in this book. Ideally a unit will only report each case once, however if there is doubt whether a case has already been reported please assume it has not been and notify.

### **Follow-up of reports**

A questionnaire requesting details will be forwarded to practitioners who report a case.

### **If you have any questions please contact:**

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