

CLINICAL SURVEY OF RETINOPATHY OF PREMATUREITY

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Purpose. The sequela of retinopathy of prematurity (ROP) is the important cause of infant blindness. This study was designed to screen the high-risk premature infants and investigate the incidence, risk factors and natural course of ROP.

Methods. From October 1997 to October 1998, all premature infants with birth body weight (BBW) less than 2000 gm, or gestation age (GA) less than 36 weeks, or receiving prolonged oxygen therapy were enrolled and underwent ophthalmologic examination during postnatal 4-6 week period in Taipei Veterans General Hospital. To correlate the risk factor of ROP, we recorded the GA, BBW, and duration of oxygen usage.

Results. Total 108 premature infants, either born in our hospital or transferred outside, twenty-seven

patients (53 eyes)(25 %) had ROP, of whom 15 eyes (6.9 %) developed threshold ROP and received therapy. In ROP group, the average BBW and GA (1267 ± 341 gm and 29.7 ± 2.7 weeks) were significantly lower than the non-ROP group (1703 ± 368 gm and 32.3 ± 2.2 weeks). Most eyes with stage 1 or 2 ROP spontaneously regressed. Twelve eyes in 6 cases had stage 3 ROP, 8 eyes (66%) progressed and received treatment. The average GA, BBW and prolonged oxygen respiratory therapy more than 5 days were statistically significant risk factors of ROP development.

Conclusion. Every effort should be made to prevent advanced ROP. The timely clinical screening fundus examination of high-risk premature infants is important. Adequate therapy should be done immediately for threshold ROP.

Received: January, 26, 2001. Revised: March, 23, 2001. Accepted: July, 27, 2001.

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