

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
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Service (sector) Retina and Vitreous

Retinopathy of prematurity : visual acuity, refractive and anatomical outcomes in preterms infants with treated eyes versus spontaneously regressed disease.

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Purpose: To compare the visual acuity (VA), spherical refractive error and anatomical outcomes in premature infants with treated threshold stage 3 retinopathy of prematurity (ROP) and those with spontaneously regressed subthreshold stage 3 ROP. **Method:** 6 month and 3 year data collected from infants examined between 1988 and 2000 with spontaneously regressed stage 3 ROP and treated ROP were retrospectively reviewed. **Results:** 286 preterms were treated, 100 eyes received cryotherapy and 236 eyes laser photocoagulation. 134 infants had spontaneously regressed subthreshold stage 3 ROP. VA was 20/50 or better in 70% of eyes at 6 months of life and 89% was 20/50 or better at 3 years of age. Eyes with regressed ROP had VA better than 20/40 in 88% at 6 months of life and 93% at 3 years of age. The mean spherical equivalent error at 6 months was -2,00 DE and at 3 years was -4,00 DE in laser treated group and in cryotherapy treated group, at 6 months was -4,00 DE and at 3 years, -8,50 DE. In eyes with regressed ROP the spherical equivalent at 6 months was -1,00 DE and at 3 years, -2,00 DE. 7 eyes had total retinal detachment (1,2%), 6 eyes treated with cryotherapy and 1 eye with laser, 3 eyes had temporal retinal detachment (0,5%) treated with cryotherapy and 15 eyes (2,6%) developed macular ectopia, all treated with laser. None spontaneously regressed ROP eye had macular dragging.

Conclusion: Eyes within the treated groups were more myopic than eyes within the spontaneously regressed group. The regressed ROP group had better VA and better anatomical outcome at 3 years of age than treated group.