USE OF INTRAVITREAL ANTIANGIOGENIC DRUG IN A LARGE STUDY IN THE TREATMENT OF RETINOPATHY OF PREMATURITY

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Background

Retinopathy of prematurity (ROP) is a proliferative disease of the retinal vasculature that can cause severe visual loss in premature newborns. Intravitreal Bevacizumab has shown promise as a treatment for ROP

Purpose

To evaluate the efficacy and safety of intravitreal bevacizumab in preterm infants with retinopathy diagnosed with grades 1 to 3 plus

Material and methods

Retrospective study of 24 months' duration in which patients were included less than 30 weeks gestational age diagnosed with ROP to grade 3 plus and weight less than 1,500 g. Patients received a single dose of 0'625 mg intravitreal bevacizumab at three months post-gestational age and were followed-up every seven days, fundus examination according to protocol Ophthalmology Unit for assessment degree of retinopathy and extent of the avascular zone. The primary efficacy and safety variables were defined as: complete vascularization (CV) in both eyes (BE) and the absence of adverse events grades CTCAE (Common Terminology Criteria for Adverse Events) II or higher, respectively

Results

Nine patients (six men and three women) were included, with a mean gestational age of 25 weeks [23,29]. Previous diagnosis: two patients with aggressive ROP in BE, two patients with grade 3 ROP in zone 2 plus in BE, one patient with grade 2 ROP in zone 2 BE plus in two patients with grade 1 ROP in Zone 2 BE a zone 3 ROP one patient and one patient with ROP in zone 3 in the right eye and temporal zone II ROP I festooned in the left eye.

Efficacy: The primary efficacy criterion (CV in BE) was achieved in seven of the nine cases, with an average time to BE and CV in four months [1,6]. Furthermore, in five patients early response was achieved in BE at week four. Security: During the study period no endophthalmitis, retinal detachment, or systemic side effects forced to discontinue treatment was observed

Conclusions

This study shows that intravitreal bevacizumab has been used effectively and safely in the therapeutic approach to ROP variable degree, achieving 85% CV