Oral propranolol is a nonselective beta blocker that could play a relevant role in exudative control of retinal hemangioblastomas, as during oral propranolol treatment the size of the lesion remained stable and exudative activity was entirely inhibited. The relapse exhibited by the patient during the months in which he discontinued propranolol treatment gave rise to its reintroduction. Since then, 18 months have passed without relapse, which led us to take the decision to prescribe the treatment indefinitely.

Propranolol inhibits the vasodilating effect of adrenergic molecules by inhibiting Beta receptors of endothelial cells, promoting vasoconstriction and diminished blood flow in the hemangioma. In addition, it has an angiogenesis-inhibiting capacity because adrenaline and noradrenaline can induce the expression of VEGF and blocking the action of these molecules by means of propranolol could diminish the concentration thereof. There is a range of possible action mechanisms that reduce exudative activity and therefore treatment with oral propranolol could be considered as a therapeutic option in ocular hemangioblastomas that do not respond to conventional therapies.

To the best of our knowledge, this is the first described case of a serous macular detachment secondary to CRH successfully treated with oral propranolol. Subsequent studies should be proposed to confirm the potential efficacy of propranolol in the treatment of CRH.

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Comparative study of modification of the osmolarity in graft versus host disease

Estudio comparativo de la modificación de la osmolaridad en enfermedad injerto contra huésped

Dear Editor,

Patients with the Graft Versus Host Disease (GVHD) develop severe ocular dryness that produces significant modifications in the ocular surface and is difficult to treat. Our study endeavors to estimate ocular surface osmolarity in patients with GVHD and to demonstrate the possible differences in osmolarity evolution by the use of a hypo-osmolar tear (Artificial®) (Angelini, Barcelona, Spain) versus a non-hypo-osmolar tear (Artificial®) (Angelini, Barcelona, Spain).

Seventeen patients diagnosed with GVHD had a Schirmer test, BUT, document osmolarity study (TearLab®, Equipsa) and a lacrimal meniscus study by means of OCT (Cirrus) (Carl Zeiss Meditec, Dublin, CA). The concomitant treatment was standardized and treatment was established with a drop six times a day of Lubristil® in both eyes in nine patients, and one drop three times a day of Artific® in eight patients. One month after beginning the treatment, a new Schirmer test, osmolarity test and lacrimal meniscus study were performed. In what concerns results, the baseline osmolarity values in the sample confirmed that 5% of patients obtained values between 340 and 360 mOsm/l, 30% obtained values between 320 and 340 mOsm/l, 50% obtained values between 308 and 320 mOsm/l and 15% obtained values under 308 mOsm/l. The mean osmolarity value was 310.32 ± 7.65 mOsm/l. In the group of eight patients treated with Artific®, osmolarity diminished in 50% of cases (308.05 ± 1.03 mOsm/l mean value at 282 ± 2.09 mOsm/l). The Schirmer test improved in all cases (8 ± 1.56 mm mean value at 12 ± 2 mm) and the lacrimal meniscus measured with OCT (Fig. 1) increased in all cases (85 ± 1.2 μm mean value at 120 ± 2.03 μm). In the group of nine patients treated with Lubristil®, osmolarity diminished in 65% of cases (328 ± 1.9 mOsm/l mean value at 305 ± 1.54 mOsm/l). The Shimer test improved in 75% of cases (13.8 ± 1.99 mm mean value at 19.14 ± 1.76 mm). In the remaining 30% the same values were maintained. The lacrimal meniscus measured with OCT (Fig. 2) increased in 80% of cases (180.28 ± 1.09 μm mean value at 161.3 ± 1.65 μm). All the results were statistically significant (p < 0.05).

We consider the lacrimal osmolarity measurement given by the TearLab® system in patients with GVHD as a reliable and objective measure that allows us to establish a classification on the basis of patient severity (slight, moderate, severe) and to monitor response to treatment by means of artificial tears. On the other hand, the use of Artific® as well as of Lubristil® has demonstrated to be efficient in the treatment of dry eye in patients with GVHD, with higher osmolarity reductions being achieved with the use of Lubristil® (Angelini, Barcelona, Spain).

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