P 187

ANTERIOR CHAMBER PUNCTURE OF THE EYE ON PATIENTS WITHOUT TOXOPLASMOSIS.

Results of the PCR, the C coefficient and capture assay.

A.DUCASSE - E.THELLIEZ - C.MARX CHEMLA - J.M.PINON-

PURPOSE

the autors study the results of the PCR, the C coefficient and the Ig A antibodies of 30 patients without toxoplasmosis.

METHODS

An anterior chamber puncture is operated on 30 patients undergoing cataract surgery.

RESULTS

Contrary to all expectations, some of the results tend towards evolutional toxoplasmosis.

CONCLUSION

The interest of these methods concerning the biological diagnosis of ocular toxoplasmosis is by no means being questioned by these results, yet they should be carefully interpreted.

P 188

Monitoring endophthalmitis therapy by aqueous antibiotic assay.

Halder S.A.[1], Suharwardy J.[1], Hassett P.D.[1], Bowler I.C.J.W.[2], Bron A.J.[1]

[1] Department of Ophthalmology, University of Oxford.

[2] Department of Bacteriology, Oxford Regional Public Health Laboratory.

Purpose: Intravitreal antibiotic is the mainstay of endophthalmitis treatment. Repeat injections should be based on the knowledege of tissue levels. The purpose of this study is to assess the value of aqueous and vitreous assay.

Methods: Aqueous and vitreous were assayed for antibiotic at the time of reinjection of 5 patients with endophthalmitis. Most patients recieved vancomycin 2 mg and amikacin 0.4 mg : one recieved amikacin 1 mg and another vancomycin 1 mg. In one patient the injection was repeated at 24 hours and in 3, at 48 hours. One patient received 3 injections.

Results: Aqueous vancomycin varied from 8.4 to 90 mg / L, exceeding the bacteriocidal level for sensitive gram $^{+}$ve organisms. Aqueous amikacin ranged from 2. 1 to 8.7 mg/L and therefore failed to provide adequate cover against some gram $^{-}$ ve organisms. In two patients vitreous vancomycin levels were 93 and 96 mg/L and in one the amikacin level was 21.3 mg/ L.

Conclusions: Antibiotics such as amikacin and vancomycin are rapidly assayed by fluorescence polarisation immunoassay. In the present study aqueous vancomycin levels were well within the therapeutic range and at times aproached retinotoxic levels (100 mg / L). The highest levels of aqueous amikacin also bordered on retinotoxic levels (20 mg/ L) whereas the lowest were potentially subtherapeutic. The present study shows that aqueous and vitreous sampling within 24 - 48 hours of initiating therapy can provide a guide to the timing of future interventions.

P 189

RELATIONSHIP BETWEEN ANTERIOR UVEITIS AND HELICOBACTER PYLORI INFECTION

Wild J. Schönherr U.

Department of Ophthalmology, University Erlangen Nürnberg, Erlangen (Germany)

Purpose. Infect associated mechanism are discussed to play a role in the pathogenesis of anterior uveitis.The purpose of this study was to evaluate the relationship between *Helicobacter pylori* infection and anterior uveitis.

Patients. 21 patients with acute iridocyclitis (15 female and 6 male) were examined for seropositivity for *Helicobacter pylori*. The age ranged between 24 and 49 years. In 14 patients HLA-B-27 was positive. In 16 patients a systemic steroid treatment was necessary.

Results. Serology revealed antibodies against *Helicobacter pylori* in 8 patients. There was no correlation between HLA-B 27 and seropositivity for *Helicobacter pylori*. 5 patients with *Helicobacter pylori* seropositivity were treated with systemic steroids. In 4 of these 5 patients treatment had to be interrupted because of gastrointestinal problems. In only one of 11 seronegative patients gastrointestinal problems occured under systemic steroid treatment. Gastrointestinal complications under systemic steroid treatment for anterior uveitis were significant ($p < 0,05$) more frequent in patients seropositive for *Helicobacter pylori*.

Conclusion. There was no difference in the prevalence of *Helicobacter pylori* seropositivity in patients with anterior uveitis compared to the normal population. *Helicobacter pylori* is known to be the main cause of gastrointestinal ulcer and is treatable by antibiotic therapy. Patients with *Helicobacter pylori* infection showed significant more gastrointestinal problems in systemic steroid therapy. In severe anterior uveitis systemic steroids are the treatment of choice. In case of gastrointestinal problems under systemic steroid therapy a *Helicobacter pylori* infection should be diagnosed and treated to allow a further steroid treatment.

P 190

TITLE: CORNEAL ENDOTHELIAL TOXICITY OF MITOMYCIN C IN RABBITS

AUTHORS: Cano-Parra J[1], Capdevila C[2], Ruiz-Lapuente C[1], Martinez-Palmer A[1], Castilla M[1], Diaz M[2].
1.- IMIM, Barcelona.
2.- La Fe Hospital, Valencia.

Purpose: To investigate the clinical and histological toxicity of the exposure of the rabbit corneal endothelium to anterior chamber injection of liposome-encapsulated 5-fluorouridine (L5-FUR) at concentrations of 1 mg/ml and 0.38 mg/ml and intravitreal injection of L5-FUR at 1 mg/ml.

Methods: A total of 12 New Zealand white rabbits were divided in three groups: A) Anterior chamber injection of 0.1 ml of L5-FUR (1 mg/ml), B) Anterior chamber injection of 0.1 ml of L5-FUR (0.38 mg/ml), C) Intravitreal injection of L5-FUR (1 mg/ml). We treated 3 eyes and 1 control eye (injection of 0.1 ml of empty liposomes) for each group. We studied the clinical corneal edema 24 h after and sacrified the rabbits to study the endothelium using light microscopy (silver stain).

Results: Treated groups: A) We did not observe clinical corneal edema, but we demonstrated a moderate irregular staining of endothelial membranes, a moderate sign of toxicity. B) We did not observe clinical edema, but we demonstrated a lower irregular staining of endothelial membranes, a moderate sign of toxicity. C) We did not observe clinical edema, and endothelial membranes were normal such as the control group.

Conclusions: Anterior chamber injection of liposome encapsulated 5-fluorouridine (L5-FUR) at concentrations of 1 mg/ml and 0.38 mg/ml causes cyclitic membranes and a moderate histological endothelium toxicity whereas intravitreal injection of L-5FUR (0.1 mg/ml) appears nontoxic for the corneal endothelium.