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Last Name - Shih First Name - Liang Middle - Jung

Service (sector) Retina and Vitreous

Nº CEP

## Ocular changes due to systemic alpha-interferon in therapy for hepatitis C.

Liang, S.J.; Ciola, F.B.; Conceição, R.D.O.; Silva, A.E.B.; Moraes, N.S.B.

Purpose: Alpha-interferon (IFN), used in therapy for various diseases, is well-Known to cause microvascular changes. There are descriptions of retinal vascular abnormalities due to this drug in the literature our purpose is to describe ocular (with special attention to fundoscopic) changes due to IFN. This is a prospective, descriptive and observational (non-interventional) study, and its results are preliminary.

Methods: Patients were selected from the Gastroenterology service with indication of IFN therapy for hepatitis C. These patients underwent an ocular examination (including VA measurement, refraction, biomicroscopy, IOP, dilated fundoscopy and fundus biomocroscopy) before and 1,3,6 and 12 months after starting therapy. HIV patients abd those who had a history of previous treatment with IFN were excluded from the stady, but examined.

Results: Fifty-one patients were selected from November 1999 to june 2000 The male-to-female ratio was 1.55. The age average was44.7 years (range 21-66). There patients were HIV positive had 5 hed history of previous therapy with IFN.

The best corrected visual acuity ranged from 20/15 to 20/40 (refraction was prescribed to those who had vision improvement), and IOP levels were between 9 and 20 mmHg. Most of the symptomatic patients complained of foreign body sensation in the eyes (10 of 44), mainly in the first 2 months of therapy, witch becomes more tolerable with time. General complaints comprised flu-like symptoms, joint pain, depression, headache, general weakness.

Ocular findings related to IFN were development of cotton wool spots (e eyes) and intraretinal hemohage (1 eye). Those patients didn't present any kind of complaints. In one patient that had history of previous treatment, vitreous hemohage, cotton wool spots, hard exsudates and vascular tortuosity were observed. Toxoplasmic lesions were noticed in two HIV patients, but not related to the therapy.

One patientstopped the treatment spontaneously. One patient died during the study time, due to another disease not related to hepatitis, and one patient refused to be examined after starting the treatment.

Conclusion: There are retinal vascular changes due to systemic alpha-interferon for hepatitis C. There are no studies in our contry describing the features of these microvascular abnormalities. General doctors and specially gastroenterologists should pay special attention to this problem, and refer patients to the ophthalmologist in order to determine and follow any lesion that may be related to the use of this drug.