Ocular Complications Associated With The Use Of Interferon In Treatment Of Chronic Hepatitis C.

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ABSTRACT

Chronic infection with hepatitis C virus (HCV) is a major health care problem, affecting an estimated 170 million people worldwide**.** For more than a decade, Egypt has been widely regarded as having an epidemic, with the highest recorded prevalence of HCV in the world. .Explanations for this unique epidemic in Egypt has been an ongoing subject of controversy. Interferons are natural chemical messengers that play an important role in the body's immune response to foreign pathogens, especially viruses and cancerous cells. . In the review of literature, interferon therapy proved to have several ocular side effects. The most common is interferon retinopathy in the form of retinal hemorrhages and cotton wool spots at the posterior pole around the disc**.** IFN related retinopathy was first described in**1990 by Ikebe and his coworkers.** The pathogenesis of interferon-associated retinopathy is unclear. Cotton wool spots are the result of the obstruction of axoplasmic flow secondary to ischemia of the retinal vasculature. Despite the retinopathy, subjective complaints are uncommon and visual acuity is not always impaired. Most patients with interferon associated retinopathy can continue with the planned course of interferon therapy.This Prospective, descriptive study aimed to evaluate ocular complications related to interferon therapy for chronic hepatits C as incidence and possible risk factors. It took place AT Fayoum University Hospital, ophthalmology department from June 2013 till May 2014. Fifty patients were selected from Fayoum Viral Hepatitis Center. The patients underwent full laboratory and ophthalmological examination. They underwent examination before starting treatment, at12, and 24and36 weeks of interferon therapy. Colored fundus photographs and fundus fluorescein angiography were documented for comparison, when retinal abnormalities and ischemic retinopathy were detected. Patients with positive signs had fundus photography, flourescine angiography and the patients were followed up monthly. The complications were mainly posterior segment in the form of retinopathy. The retinopathy developed in average of 13 weeks after the start of therapy. Retinopathy develops in the form of cotton wool spots and retinal hemorrhage both involved the posterior pole. The retinopathy disappeared spontaneously during therapy. Despite the retinopathy, all patients have had good visual acuity. Pretreatment HCV level were shown to be of statistical significant for the development of retinopathy. In particular, patients with diabetes mellitus and hypertension have shown a high frequency of development of retinopathy during treatment. Patients should be examined before starting therapy to look for pre-existing retinopathy. Concerning anterior segment, dry developed in nine patients and persisted throughout the period of follow up. Fortunately, in our study none of the patients developed atypical ocular complications, which were previously described in literature as:*Choroidal neovascularization,VKH, Orbit and ocular Adnexacomplications (*AlopeciaEye lashes Hypertrichosis.Eye lid and eye brow trichomegaly)**,***Optic disc edema* and *Glaucoma***.** The conclusion of this study states that, most of interferon related complications are benign and transient and treatment can be continued under follow up. Also the study showed that pretreatment HCVserum level, diabetes mellitus, hypertension, and anaemia could be risk factors for development of interferon related retinopathy.