

Vestibular assessment in hepatitis c patients treated with interferon and ribavirin

Thesis submitted for partial fulfillment

of

Master degree in Audiology

By

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Summary

IFN/RBV combination in treatment of chronic HCV infection had many adverse effects including hearing and vestibular system. In literature, few studies evaluated the effect of these drugs on hearing, but none, to the best of our knowledge, evaluated the vestibular system.

This study aimed to evaluate the effect of dual treatment with IFN/RBV on hearing and on vestibular system in chronic HCV patients.

This study was carried out on one group consisted of forty patients (40 ears) with CHC who were examined before treatment then followed up during 6 months of treatment.

After receiving the treatment 60% of the participants had no associated conditions, while 27.5% had anemia, 2 of them (5%) had hypertension and one participant (2.5%) had hyperthyroidism.

During receiving the treatment 11 patients of the study group reported hearing loss (was more frequent among those with associated conditions than others) and 10 patients of the study group reported tinnitus (was more frequent among patients without associated conditions than those with these associated conditions).

As regard Audiometric measurements 16 patients of the study group developed SNHL, 10 patients of them have unilateral SNHL while 6 patients have bilateral SNHL. Patients with hearing loss were older than those without hearing loss.

Hearing loss was higher among male than in female also hearing loss was higher among patients with associated condition.

○ patients have minimal SNHL (a change >10 dB after treatment but within normal range), 4 patients have mild SNHL (26-30dB) and 2 patients have moderate SNHL (36-40 dB).

Only 4 patients have positive fukuda test. There is no statistically significant between the age, sex of those with normal fukuda test.

VNG was performed to all cases. VNG subtests were spontaneous nystagmus, gaze evoked nystagmus, oculography tests (smooth pursuit, saccade and optokinetic), positional tests, positioning tests, and bithermal caloric test.

Only 4 patients developed spontaneous nystagmus. There is no statistically significant between the age and sex of those with no spontaneous nystagmus results and those with weakness.

40% of participants had normal caloric test result, while 40% had decreased caloric responses. 100% had unilateral weakness and 40% had bilateral weakness after treatment.

There is no statistical significance of the presence or absence of an associated condition and the results of the caloric test.