

## Reversible peg-interferon-induced unilateral sensorineural hearing loss during hepatitis B treatment

Hepatit B tedavisinde peg-interferona bağlı gelişen geri dönüşümlü tek taraflı sensorinöral işitme kaybı

*To the Editor*

A 42 years old male with HBeAg-negative hepatitis B was started on therapy with 180 mcg of pegylated interferon alpha 2a (Pegasys, Hoffmann-La Roche, Switzerland). His general status at the beginning of therapy was excellent and he did not report having any hearing problems in the past.

After completing nine weeks of therapy without any side effects, on 10<sup>th</sup> week visit he presented with left-sided hearing loss. It started with tinnitus 3 days after previous injection of pegylated interferon (pegIFN) and quickly progressed in next couple of days. Scheduled 10<sup>th</sup> dose of pegIFN was skipped and patient was referred to otorhinolaryngologist who reported that both ears were normal on visual examination. Subsequent audiometric testing was consistent with severe unilateral left-sided sensorineural hearing loss.

We stopped therapy with pegIFN and administered high doses (6 tablets divided in three daily doses) of vitamin B complex tablets (Polibevit, Bosnalijek, Sarajevo, Bosnia and Herzegovina). Patient was followed-up on outpatient basis with weekly performed audiometry. At the beginning of third week from symptoms onset, patient reported gradual and then complete hearing restoration which was confirmed by following audiometry testing.

Since patient insisted with continuation of treatment, on week 5 after onset of hearing loss we re-

commenced with 90 mcg of pegIFN increasing it to 180 mcg in following week. He finished therapy with minor hematologic side effects and without any further occurrences of hearing problems.

Side effects of interferon (IFN) therapy are well documented; however, ototoxicity is a rare side effect which is not well known among those that prescribe any form of IFN. Yet, there are several reports about it in patient using conventional or pegylated IFN (1-3). Recent report of six patients with hepatitis C and hearing loss associated with use of pegIFN demonstrated that after discontinuation of therapy hearing loss did not resolve completely but also did not worsened after recommencing it (4). To our knowledge this is the first described case of patient recovering from pegIFN induced hearing loss and furthermore continuing therapy without any additional hearing problems.

After occurrence of hearing loss in patient on IFN therapy a 4 week discontinuation with initial evaluation by otorhinolaryngologist and weekly audiometry testing could be done. Treatment with high doses of B complex vitamins may or may not be prescribed. Patient should be evaluated after 4 weeks or even earlier in case of hearing restoration and after presenting possible risk of continuation of therapy to patient and obtaining another informed consent treatment might be continued.

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