

EVALUATING EFFECTIVENESS OF INTRA-TYMPANIC DEXAMETHASONE INJECTION OF MENIERE PATIENTS WITH ALTERATION OF ELECTROCOCHLEOGRAPHY

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Introduction

Meniere's Disease (MD) is a disease of inner ear which presents itself with repeated episodes of vertigo (96.2%), tinnitus (91.1%) and sensorineural hearing loss (87.7 %). There is no individual test for diagnosing MD. ECOG is one of methods mostly used. While there is no definite cure for MD intratympanic injection of dexamethason is one of the methods most debated. In this article we sought to assess the effects of intratympanic injection of Dexamethasone on definite MD using ECOG.

Methods:

In this hospital based case series, we had a group of 36 patients with definite MD presenting to amir alam hospital ,Tehran, Iran from March 2012 to March 2014.we measured audiometric values and ECOG in all the patients before , 1 month and 6 months after 4 mg/1 cc IT injection of dexamethasone in anterior superior aspect of tympanic membrane. Injections were done every week for 3 weeks. We assessed vertigo, hearing loss, ECOG data and tinnitus in patients.

Results:

Based on AAO-HNS criteria, 4 patients (11%) had improved hearing. PTA had no significant difference following IT injections ($p=0.492$)while SDS was significantly improved ($p=0.008$).there was significant improvement between vertigo before and 1 month after IT injection($p<0.001$) while this effect didn't last for 6 months and there was no significant difference between vertigo before and 6 months after injection.($p=0.2$)

Data for tinnitus and ECOG were not significantly different before and after our intervention.

Discussion:

One month after intratympanic dexamethason injection, 75% improvement was seen in at least one class using numeric value scale of vertigo. After 6 months it fell massively to 19.5% which could be a sign of short term effect of this intervention. Assessment of vertigo before and one month after the injection using AAO-HNS criteria, demonstrated significant difference ($p<0.001$).the same result was also seen between the results of 1 month and 6 months after the injection ($p<0.001$). ECOG before and after intratympanic injection of dexamethasone were not significantly different although there was a trend toward being different. ($p=0.052$) Based on our results and other previous results, IT injection of dexamethason can alleviate vertigo as the most common and serious symptom of MD at least for a 3 month period and ablative methods can be prevented. Although this effect will not last long and repetitive medication is also mandatory

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