

## البحث الثالث

(بحث مشترك غير مشتق من رسالة)

عنوان البحث باللغة الانجليزية :

**Systemic steroids and Intratympanic steroids perfusion as an initial therapy for Idiopathic sudden sensorineural hearing loss ,a comparative study .**

### **Objective**

The objective of this study is to compare the efficacy of systemic steroids (SS) and the intratympanic steroids (ITS) in the treatment of idiopathic sudden sensorineural hearing loss (SSNHL).

### **Study design**

This is a prospective study.

### **Material and methods**

This study included 21 patients suffering from idiopathic SSNHL. They were divided into 2 groups according to the modality of treatment. Group A included 10 patients who were treated with SS and group B included 11 patients who were treated with ITS due to their refusal or contraindication to take SS. A pre-treatment pure tone audiometry (PTA) was performed for all patients at their first presentation for establishment of the diagnosis and assessment of the degree of the hearing loss. A post-treatment PTA was done at the follow up visit 2 weeks later for the assessment of the degree of hearing loss and hearing improvement. The data of both groups were compared together.

### **Results**

For group A the pre-treatment PTA average ranged from 37.5 to 113.3 db with a mean of  $72.3 \pm 25.11$  db and the post-treatment PTA average ranged from 13.3 to 113.3 db with a mean of  $49.24 \pm 33.72$  db. On comparing the means of the pre-treatment and the post-treatment PTA averages the difference was found to be statistically significant ( $P = 0.03$ ). The overall hearing improvement rate using SS was 60%. For group B the pre-treatment PTA average ranged from 50 to 115 db with a mean of  $77 \pm 18.98$  db and the post-treatment PTA average ranged from 26.6 to 101.8 db with a mean of  $50.05 \pm 23.3$  db. On comparing the means of the pre-treatment and the post-treatment PTA averages the difference was found to be statistically highly significant ( $P = 0.001$ ). The overall hearing improvement rate using ITS was 72.7%.

### **Conclusion**

Both SS and ITS have proven to be effective in the treatment of idiopathic SSNHL, however SS seems to have a better effect in terms of cure with complete recovery to normal hearing, while ITS exerts most of its effect in partial recovery.