## Studying of the effect of Desferal in hearing among thalessemia major patients

## Abstract:

Introduction: Recently in attention to progression in care of thalassemia patients, the average age of these patients have clevated, and the quality of their life has payed attention more. So, it's necessary to study the side effects of this disease, such as iron precipitation in different organs due to continues blood infusion.

Methods and materials: It was a retrospective corss-sectional study to assessment of incidence of SNHL due to clelation treatment with desferal in thalassemia major patients in Ardebil Ali-Asgar hospital were asked to do audiometery test, the serum ferritin was measured at the same time.

Result: Out of 56 patients, 4 was excluded because of his unwillingness to do audiometery tests. Out of 52 patients, 18 of them, had conductive hearing loss in right eat and 15 had conductive hearing loss in left eat, in attention to otoscopic examination and tempanometery results, in attention to otoscopic examination and tempanometery results, conductive hearing loss was due to recurrent otit's media and chronic serous otitis, 2 of them had SNHL.

Patients with SNHL had light average of Desferal level than the others. (30 & ng/kg), but (there wasn't any - evaluation - variance in alanysis), maybe due to inadequate samples number.

In patients with SNHL, ferritin average was lighter than the others. (4051 ng/dl) that showed inappropriate control of iron load in these patients in spite of high Desferal dose, it showed effect of iron load in presentation of SNHL due to iron precipitation in cochlean of interval ear, too, but there wasn't any evaluation variance in analysis.

Conclusion: Results show that with regular otoscopic examinations (once a year), a cute otitis episodes could be treated and chranic otitis will be presented in these patients. To prevent SNHL, Desferal taking should be controlled and regular audiologic test performed and early treatment adjusted.

**Keywords:** Major thalassemia – audiometery test – sensorineural hearing – loss – Desferal – Ali Asghar hospital of Ardabil