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## THERMAL MYRINGOTOMY VERSUS GROMMET'S TUBE INSERTION IN MANAGEMENT OF CHILDHOOD SECRETORY OTITIS MEDIA

Recently thermal myringotomy has been recommended for the treatment of secretory otitis media (Lau et al., 1985). In this research work we have studied the effectiveness of this form of surgical treatment by comparing it with the conventional myringotomy and grommet tube insertion in the opposite ear in 50 children having bilateral secretory otitis media during a 3 month follow up period. All thermal myringotomies were healed within 6 weeks. Recurrence of middle ear fluid was evident in 10 cases (20 %) treated by thermal myringotomy during the three month follow up period while there was no recurrence of fluid in the grommeted ears in the same interval. Thermal myringotomy was found to be more easier, safer and with less complications and costs than the classic myringotomy with grommet tube insertion but still the latter procedure is more effective especially when longterm aeration of the middle ear is needed.

### INTRODUCTION

Secretory otitis media is most common among children, the condition occurs as overt or covert hearing loss presenting as an educational or behaviour problems and the child is described by his teacher as inattentive. In younger children this disease may present as speech and language delay or as articulation defect (Mlaw 1987).

Myringotomy, aspiration of middle ear fluid and insertion of grommet tube is an established method of management of children with secretory otitis media. The function of the tube is to prevent the myringotomy incision from closing thus establishing aeration of middle ear cleft. However many patients underwent this procedure suffered from permanent perforation, otorrhea, tympanosclerosis and atrophic changes in the drum-head (Harell and Shea 1978).

Recently thermal myringotomy has been recommended for treatment of secretory otitis media. It is much more easier, safer, with less costs and the possibility of permanent perforation and tympanosclerosis is almost eliminated (Kent and Rhys-Evans, 1987 and Ruckely and Blair, 1988).

Evaluation of the efficiency of thermal myringotomy as an alternative to grommet tube insertion in management of childhood secretory otitis media was the aim of our study.

### MATERIAL AND METHODS:

This study comprised 50 children, 32 males and 18 females ranging in age from 5 to 15 years with a mean age of 5 years and 10 months. They were suffering from bilateral secretory otitis media as diagnosed from history, clinical examination, audiometric and tympanometric investigations.

All children were operated upon under general anaesthesia Myringotomy with insertion of Shepard grommet tube was done in one ear and thermal myringotomy was done in the opposite ear using 18 gauge angled spinal needle. The whole length of the needle was electrically insulated except 3 mm at its tip and the head of the needle. The tip was then placed on the anteroinferior part of the tympanic membrane and the head was touched by a previously adjusted surgical diathermy. The approximate dimensions of the perforation produced by this method was 3 x 2 mm. Adenoidectomy was done in the same sitting if indicated.