RESULTS

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This work included 50 children proved by clincal a and audiological examination to have SOM. These cases were given medical treatment for one month. The patient were examined clinical and audiological, every week during the peroid of treatment. The patients which were improved re- examined after three months clinical and audiological for detection of recurrence of effusion.

The 50 cases included 27 males and 23 Females. There ages ranging from 4 to 14 years.

Thirty eight cases (76 %) of the totol group presented to the outpatient clinic complaining of diminusion of hearing. The remaining 12 cases (24 %) were presented to the clinic by other symptoms such as nasal obstruction, catarrh, recurrent attacks of acute tonsillitis and earache see table (1) .

On examination of the tympanic membrane 35 cases (70%) of the total group showed retraction of the drum with injection of radial and annular blood vessels .

The remaining cases showed other signs as retraction without injection and fluid level see table (11)

After medical treatment 17 cases (34 %) of the total group were imroved by treatment as evidenced by clinical and audiological examination, 14 cases out of these 17 cases were of acute SOM,

The remaining 33 cases (66 %) of total group Showed no improvment by medical treatment proved by clinical and audiological investigations. These cases of chronic type of SOM.

The audiological results including tympanometry and audiometry which was done during the period of treatment will be illustrated in tables III IV and Fig 1.

After three months from the end of treatment re-exa-mination were done for the improved 17 cases. Recurrence occurs in 5 cases while the remaining cases showed no recurrennce of SOM as evidenced by both clinical and audiological examinations See Table V and VI.

Table I

Main complaints given by the patients.

Complaint	No of cases
- Diminution of hearing	38
- Ear ache	5
- Nasal obstruction and catarrh	6
- Recurrent attacks of acute tonsillitis mouth breathing and snoring at night.	15
- Recurrent attacks of ocute otitis media	9
- Combination of morethan one symptoms	43

Table II

Various clinical signs of tympunic membrane.

Signs	No of cases
- Retraction and injection	35
- Retraction only	5
- Bulging and injected	5
- Injection only	3
- Fluid level	2

Table III

Types of tympanograms

before and after treatment

No of cases	Before ttt	After 2 ws	After 4 w	Percent-
33	Type B	Type B	Type B	66%
3	Type B	Type C	Type A	6 %
14	Type C	Type A	Type A	28%

Table IV

Pure tone audiometry (PTA).

* ABG before and after treatment.

No of cases	Before ttt	After 2 Ws	After 4 Ws	percent-
33	35-55dB	35-55dB	35-55dB	66%
3	30-50dB	20-40dB	5-10dB	6 %
14	20-40dB	15-25dB	5 dB	28 %

* ABG = Air Bone Gap.

Table V

Tymponogram after 3 months for improved cases.

No.of. Cases	Type at end of ttt	after 3 ms from the end - of ttt
12	Type A	Type A
5	Type A	Type B

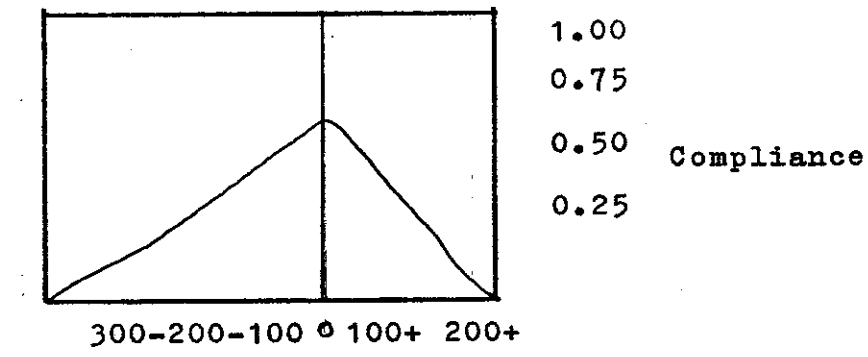
Table VI

Pure tone audiometry for the improved cases after 3 months.

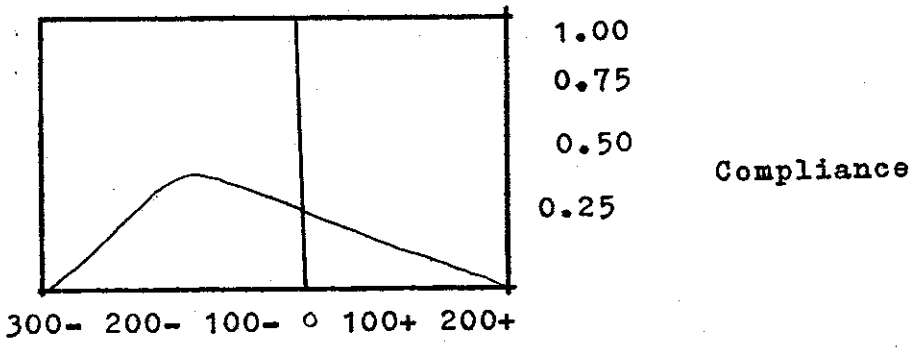
No of cases	ABG at end of ttt	ABG after 3 moths of ttt
12	5-10 dB	5-10 dB
5	5-10 dB	20-45 dB

Tympanometric patterns

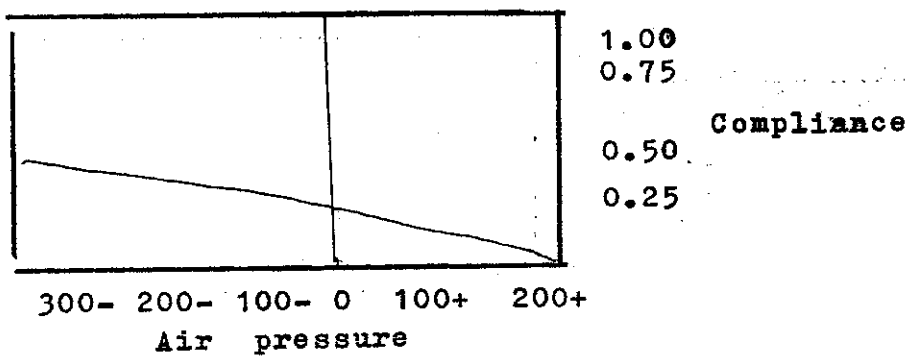
Fig I



Type (A)



Type C



Type B

DISCUSSION

Secretory otitis media is one of the commonest diseases of childhood, it has been that up 80 percent of all children experience at least one episode of SOM by the age of 5 years (Tos et al, 1984).

Even though eventual spontaneous resolusion is the rule, the disease is clinically important for two reaons : frist because the variable conductive deafness it produces during early schoo' years may impair child eductional progress and secondly because SOM is widely considered to be the precoursor of all farms of chronic ear diseases in late life (Tos et al, 1984).

This work aims to evaluate the effect of medical treatment in SOM. It is usually directed to improve the ET function, reduce viscosity of middle ear fluid or sterilizing the middle ear mucosa nad adjacent structurs.

This work was applied on 50 children proved to have SOM, 27 males and 23 females. There ages ranging from 4 to 14 years. All patients were treated medically by antibiotics,antihistaminics, nasal drops, mucolytics, and

systemic steroids for one month.

All the patients examined clincally and audiologically every week during the period of treatment. The cases which were improved by treatment re- examined after three months to detect any recurrent cases.

This work showed by the end of period of medical treatment that 17 cases (34 %) out of the group were improved and showed resolution of effusion as evidenced by clinical and audiological examination.

The remaining 33 cases (66 %) were not improved by medical treatment and resorted to surgical interfence.

Fraser et al, (1977) Compared oral BPP ephedrine nasal drop and outo-inflation used in every combination possible with a further group recieving no treatment, he found that 28 percent of children overall resolving their effusion using tympanometry and audiogram in their assessment.

Marks et al, (1981) Comparing a month of cotrimoxazole with a month BPP. He found after six week 64 percent of the cotrimaxazole group and 27 percent of the BPP group

Perisco et al (1978) reported that in a trial involved 160 childern treated with prednisolone, 53 % achieved complete tympanometric and otoscopic resolution of effusion compared with only 13 % of 116 who responded when treated with ampcillin.

cheery (1985) found a resolution rate of 40 percent in the group treated with cotrimoxazole in comparing with placebo group.

Cantekin et al (1983) found in a double control trial with 553 subjects with SOM recieving a pseudoephedrine HCI, chlorpheniramine maleate combination, the Same rate of resolution of OME as did the control .

Cheery et al (1986) found success rate of about 40 percent of resolution of middle ear effusion using conservative managment including nasal topical decongestants, oral decongestants, mucolytics and antibacterials for long course for four weeks or more in comparing to the control group proved by clinical and audiological examinations.

Some authors reported that some of these drugs has

no rule in resolution of effusion.

Ramsden et al (1977) Compared mucodyne in large group with a control group. He found no significant difference between the two groups and 26 percent of the later group recovered spontaneously using impedance audiometry in assessment.

Klein et al (1979) tested bromopheniramine maleate to assess its value in the prevention and treatment of SOM. They reported no difference in forms of resolution of effusion but reported that with regard to prevention there was an adverse effect in children with a history of previous SOM.

From the results of the works and in comparison with the results of other studies on medical treatment, that this work better done on a wider scale of patients of SOM.

Each drug better used alone or in combination with another e.g antibiotic alone or with antihistaminic and vise versa with comparison with control group. By this method, the most effective of these druges on resolution

of MEE can be reached and so better evaluation of the action of these druges,

From the results of this work, medical treatment should be tried in every cas of SOM before resorting to surgical interference.