

Otitis externa: are we giving adequate care?

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SUMMARY. A series of 26 patients with diagnosis of otitis externa were given treatment consisting of either drops only or manual aural toilet followed by aural drops. The efficacy in terms of resolution of symptoms and clinical signs were compared. In all but the most minor of cases, adequate curative treatment had to consist of complete aural toilet as well as aural drops. It was also shown that without aural toilet and visualization of the tympanum, more serious middle ear pathology could be missed.

This study indicates that unless the patient is given the opportunity to have his ears properly cleaned, the general practitioner may not only be giving inadequate and ineffective treatment, but he may also be missing serious ear disease.

Introduction

MANY general practitioners when treating what they diagnose as being otitis externa prescribe some form of anti-inflammatory, antimicrobial, anti-fungal aural drops only.^{1,2} Standard teaching on the subject by ENT surgeons always states that adequate treatment must include manual aural toilet plus aural drops.³⁻⁵

Aims

This study was an attempt to discover whether there is any conflict between these two forms of therapy and whether, as general practitioners, we should reconsider our approach to this common problem.

Method

A series of 26 patients was studied. They represented all cases, acute or chronic, of otitis externa seen by the author himself or by his trainer over a five-month period.

Patients were randomly allocated to two groups. One group received advice and aural drops only, the other received advice,³ manual aural toilet and then aural drops. Patients were assessed at regular intervals and progress monitored.

At the initial and subsequent consultations the clinical severity of the disease was graded on a 0-4 scale,⁶ as shown below.

0—disease free

1—inflammation of canal with little or no desquamation or discharge

2—inflammation with moderate desquamation and discharge with or without mild oedema

3—inflammation with severe discharge and marked oedema

4—severe inflammation and discharge with severe oedema occluding the canal.

Patients were also noted to be acute cases (those with no similar past history), or chronic cases (those who had consulted their doctors over previous months or years with a similar complaint).

The aural drops used were Otoseptil, Locorten-Vioform, Gentisone HC and Sofradex.

The equipment used for aural toilet consisted of an ENT head mirror, a Jobson-Horne wool carrier, ribbon gauze or Pope's wicks and fine-jawed ENT forceps. No suction apparatus was available.

When disease free, patients completed a simple questionnaire enquiring as to the acceptability of the treatment they had received.

Table 1. Group of patients given aural toilet and eardrops from start of treatment.

Case number	Clinical severity (grade)	Ear involved	Type of otitis externa	Follow-up visits	Outcome
1	4	B	C	Monthly	Improved—grade 2. Not cured
3	3	B	C	4	Cured
5	2	B	C	2	Attic perforation. Ref ENT
7	3	R	C	5	Attic perforation. Ref ENT
9	3	R	A	2	Cured
11	2	B	C	4	Cured
13	2	B	C	3	Cured
15	2	B	C	5	Cured
17	2	L	C	3	Cured
19	2	R	C	3	Attic perforation. Ref ENT
21	2	B	A	2	Cured

Abbreviations: B, both; R, right; L, left; C, chronic; A, acute.

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Table 2. Group of patients given eardrops only at start of treatment.

Case number	Clinical severity (grade)	Ear involved	Type of otitis externa	Follow-up visits	Outcome
2	2	L	A	2	No change
4	3	L	A	3	Cured
6	2	R	A	2	Cured
8	2	L	C	2	No change
10	3	B	C	2	Patient defaulted
12	2	R	C	2	No change
14	2	B	C	2	No change
16	2	B	C	3	No change
18	1	B	C	3	Cured
20	1	B	A	2	Cured
22	2	B	A	2	No change
23	2	L	A	2	No change
24	1+	R	A	2	Cured
25	2	B	C	2	No change
26	2	L	A	2	No change

Abbreviations defined in Table 1.

Results

Table 1 represents those patients who were given aural toilet to start, Table 2 those patients given drops only to start, and Table 3 those patients from Table 2 who were treated without success with drops only and who then received aural toilet.

There were no cases of relapse in the five months of the study and so the term 'cured' simply means those cases graded 0 after treatment. The natural history of the disease implies some relapse after a period of time.

Table 1 shows that of the 11 cases seen, seven patients were cured, three were found to have not otitis externa but chronic middle ear disease and in one there was improvement but not cure. This case was in fact one of neurodermatitis for which the patient was regularly attending an ENT outpatients department for cleaning three times a year. The improvement seen no doubt followed from the increased amount of cleaning she was given as a result of the study.

In Table 2, of the 15 cases seen 10 patients showed no improvement after several weeks. All of these patients except one who refused aural toilet then received aural toilet and were cured (Table 3). The patient in case 8 was found to have a foreign body causing a chronic otitis externa of several months duration.

Discussion

Swabs were taken at the start of treatment although many previous studies have shown there is little if any

Table 3. Change from drops only to aural toilet.

Case number	Clinical severity (grade)	Ear involved	Type of otitis externa	Follow-up visits	Outcome
2	2	L	A	2	Cured
8	2	L	C	2	Cured (foreign body found in canal)
12	2	R	C	2	Cured
14	2	B	C	2	Cured
16	2	B	C	2	Cured
22	2	B	A	2	Cured
23	2	L	A	1	Cured
25	2	B	C	3	Cured
26	2	L	A	3	Cured

Abbreviations defined in Table 1.

difference between cure rates of the various eardrops available regardless of organisms grown. The authors used Otoseptil and Locorten-Vioform and his trainer used Sofradex and Gentisone HC. We also found swab results unhelpful and difficult to interpret in terms of likely pathogens.

Unfortunately the study had to be limited to only five months because of the author's attachment and therefore only 26 cases were found for the trial and no relapses have yet been documented.

Despite this limitation, several valid observations can be made. The most important of these refers to cases 5, 7 and 19. Cases 5 and 7 were for many years treated off and on for what was considered to be otitis externa, and case 19 was treated for several months with the same diagnosis. All three patients had previously received drops only and all reported a similar history to the other cases of true otitis in the study—that of irritation and discharge with no constitutional symptoms. After thorough cleaning of their ears, each of these patients were, in fact, found not to have simple otitis externa but chronic middle ear disease with perforation of the tympanum, a far more serious condition. Looking at the other patients in the group who were started on drops only, 10 of the 15 patients showed no improvement clinically after several weeks. Of the nine who then agreed to aural toilet, all were cured after several weeks. Likewise, apart from the three cases of middle ear disease and one case of severe neurodermatitis, all of the patients who were given aural toilet to start with were cured. This outcome included patients who had been suffering symptoms off and on for months or years, many of whom commented that their ears had not felt so normal for a number of years.

Looking again at Table 2, the only cures resulting from drops alone were those cases showing minimal desquamation and discharge.

Briefly, then, this study would seem to validate the opinion that adequate treatment for otitis externa must always include careful manual aural toilet in addition to local aural chemotherapy. More importantly, unless this cleaning is done and the eardrum is adequately visualized, there can be misdiagnosis of serious middle ear disease.

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Ambulatory blood pressures in prognosis

The blood pressure recordings obtained at the time of consultation were compared with the figures obtained by ambulatory blood pressure recording in 1,076 patients. Those patients in whom the ambulatory blood pressure was higher than had been predicted from the office of blood pressure, had a higher cumulative incidence of fatal and non-fatal cardiovascular events. This was particularly true for younger patients who had no prior cardiovascular events. However, the total number of subsequent cardiovascular events for this group was relatively small. The mean follow-up period was five years.

Measurement of ambulatory blood pressure may be one way of identifying those patients with high blood pressure who are at particular risk of developing strokes and myocardial infarctions.

Source: Perloff D, Sokolow M, Cowan R. The prognostic value of ambulatory blood pressures. *Journal of the American Medical Association* 1983; 249: 2792-2798.

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