attract them in adequate numbers by offering as good or better general and specialized medical experience as can be obtained in civil life. This the U.S. Army Medical Corps is offering.

4. **The Employment of Non-Medical Officers**

In order to reduce the load of administrative work done by Medical Officers, non-medical officers of the Medical Service Corps are employed on a somewhat wider scale than in the R.A.M.C. For instance, the keeping of mess accounts and auditing thereof are done by them as part of their duties. The spectacle of a specialist wrestling with mess accounts far into the night, in a seemingly hopeless attempt to get things to balance by the morrow, is now a thing of the past.

The employment of civilian clerks, cleaners and technicians must also be mentioned. A high proportion of such vacancies on establishment are purposely filled by civilians. This has the important effects of maintaining continuity and a high standard of efficiency and gives a more professional air to hospitals. The frequent changes of personnel so common in every Military Hospital are thus not allowed to upset departmental efficiency as there are always permanent civilian employees still there to carry on. Also the practice of posting trainee technicians or general duty orderlies to fill vacancies on establishments is largely overcome, because there are fewer vacancies to fill. It could be argued that under this system there must be a shortage of trained military clerks and technicians in the event of an emergency. In such an event there is always a severe shortage of every type of tradesmen, and deficiencies have either to be made up by call-up of civilians or by rapid training methods as required.

It is satisfactory to observe that there is a general feeling of pride and satisfaction felt by members of the U.S.A.M.C. in their Corps and in what has been achieved.

---

**INCIDENCE OF MIDDLE EAR DISEASE IN SERVING SOLDIERS**

**BY**

Captain H. B. Juby, M.B., B.S., D.L.O.

Royal Army Medical Corps

Disease of the middle ear is probably the commonest single cause of rejection of recruits for the Army. Guthrie (1936) reported that in the nine years 1927–1935, 28 per cent. of 2,931 recruits examined had chronic suppurative otitis media. In spite of the fact that many men are rejected for service on account of it, chronic otitis media was found to be common in the Armed Forces during the 1939–1945 war. Banham (1945) found that 20 per cent. of patients attending an R.A.F. aural clinic had active chronic middle ear suppuration; Craig (1941) reported that 25 per cent. of patients at a Military Hospital were affected; and Brown Kelly (1945) found that 30 per cent. of cases dealt with at a Naval Hospital had aural disease. Myles Formby (1945) stated that during 1943 there were
Middle Ear Disease in Serving Soldiers

1,000 soldiers reporting sick in Britain every week with ear trouble and that more than half of these had chronic middle ear suppuration. Recent personal experience suggested that chronic supplicative otitis media is still a common disease among serving soldiers, necessitating considerable in-patient and out-patient treatment at Military Hospitals.

A series of patients seen in the Surgical Department of a Military Hospital in B.A.O.R. was questioned and examined in an attempt to assess the incidence of aural disease in serving soldiers. The patients included both in-patients and out-patients referred or admitted to hospital for conditions other than ear trouble. The average age of the patients was 22, the majority being National Service men between the age of 19 and 21.

History.—Each patient was asked if he had ever suffered from ear trouble, followed by questioning for a history of earache or aural discharge. From the answers received patients were divided into "Positive history" and "Negative history" groups. Patients who had had their ears "syringed for wax" with no other symptoms were placed in the "Negative history" group. One hundred and forty patients were also asked if their tonsils had been removed. 33 per cent. had had their tonsils removed, 66 per cent. had not, and one man had one tonsil removed.

Examination.—Each patient’s ears were examined with an electric auriscope. If both tympanic membranes were normal no further examination was performed. Wax sufficient to obscure the view of the tympanic membrane was present in both ears in 15 patients (10 per cent.) and in one ear in a further 18 patients (12 per cent.). In each case the wax was removed by syringing. If there was any aural abnormality other than the presence of wax, the ears, nose and throat were examined in greater detail. From the results of the examination patients were divided into groups with "Positive findings" and "Negative findings."

Table I.

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>109</td>
<td>72.6</td>
</tr>
<tr>
<td>Group II</td>
<td>2</td>
<td>1.33</td>
</tr>
<tr>
<td>Group III</td>
<td>13</td>
<td>8.6</td>
</tr>
<tr>
<td>Group IV</td>
<td>26</td>
<td>17.3</td>
</tr>
<tr>
<td>TOTALS</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

Results.—Patients were divided into four groups, as shown in Table I.

Group I: These patients gave no history of any ear trouble and had normal ears on examination.

Group II: Two patients gave no history of ear trouble but had a scarred tympanic membrane on examination. On further questioning, neither of these patients could remember having had earache or aural discharge. Presumably they suffered an attack of otitis media in infancy and no recurrence in later years.

Group III: Thirteen patients gave a history of earache, with or without aural discharge, but presented normal ears on examination. These patients may have suffered from otitis externa, furunculosis or otitis media which resolved completely.
Group IV: Twenty-six patients gave a history of ear trouble and had abnormal ears on examination. Of these, 4 patients had otitis externa at the time of examination and from their history had probably had it before; 13 patients showed scarring of one or both tympanic membranes; 2 patients had a dry perforation of the tympanic membrane—both these patients had a scarred tympanic membrane in the other ear; and 7 patients had active chronic suppurative otitis media with a perforation of the tympanic membrane and discharge at the time of examination.

One of the patients with a scarred tympanic membrane and one of those with a discharging ear had had mastoid operations for acute mastoiditis.

| Table II: Patients with "Positive Findings" (Groups II and IV) |
|-------------------|-----------------|-----------------|
| **No. of Cases**  | **Percentage**  | **of Total**    |
| Otitis Externa    | 4               | 2.6             |
| Otitis Media      |                 |                 |
| Scarred tympanic membrane | 15 | 10             |
| Dry perforation of tympanic membrane | 2 | 1.3           |
| Perforation of tympanic membrane and discharge | 7 | 4.6           |

Out of 150 patients examined, 39 (26 per cent.) gave a history of ear trouble and 28 (18.6 per cent.) showed signs of aural disease on examination. Fifteen patients showed evidence of healed otitis media, an incidence of 10 per cent. Nine patients showed evidence of chronic suppurative otitis media, which was active in 7 cases and quiescent in 2 cases, an incidence of 6 per cent.

**PULHEEMS Assessment.**—The medical category of the 9 patients with chronic suppurative otitis media was investigated, and it was found that in all except two cases it was P1 or P2 and H1 or H2. In one case the aural disease had probably arisen during Army service, but in the other six patients the history extended back to childhood, indicating that these men had been incorrectly assessed on entry to the Army. None of these patients with chronic suppurative otitis media should be assessed higher than P5, with the H assessment depending on the degree of impairment of hearing. Those with active disease necessitating frequent treatment should be P7.

**Summary.**—Chronic middle ear disease is common among serving soldiers in spite of the fact that it is a frequent cause of rejection of recruits. In a series of patients attending a Military Hospital with complaints other than ear trouble it was found that 6 per cent. suffered from chronic suppurative otitis media and that a further 10 per cent. showed evidence of healed otitis media.

My thanks are due to Colonel J. Gordon Black, A.D.M.S., British Troops, Berlin, for permission to publish this article.

**REFERENCES**

Incidence of Middle Ear Disease in Serving Soldiers

H. B. Juby

*J R Army Med Corps* 1953 99: 115-117
doi: 10.1136/jramc-99-03-06

Updated information and services can be found at:
http://jramc.bmj.com/content/99/3/115.citation

These include:

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/