

## The open access ENT casualty service

R. AGRAWAL, M.S., S. HAMPAL, F.R.C.S., L. M. FLOOD, F.R.C.S. (Middlesbrough)

### Abstract

The ENT specialist's experience of emergencies is usually influenced by a process of prior selection in the GP surgery or in a general Casualty Department. A survey of 1,000 consecutive patients presenting to a 24 hour open access ENT Casualty service is presented. For a variety of reasons, over half of these patients had never sought their G.P.'s advice for their ENT complaint but preferred the hospital service. The value of even a brief exposure to ENT casualty work for GP trainees is demonstrated.

### Introduction

Casualty work can constitute a major proportion of the workload of an ENT unit. The North Riding Infirmary, Middlesbrough, is a relatively small hospital providing solely specialist services in ENT and ophthalmology. In the year 1990 the ENT Department saw 6,118 new patients in out-patient clinics, and a further 4,342 first attenders in its Casualty Department. A survey of attendance patterns to this open access 24 hour ENT casualty service reveals some abuse of the facility, but also shortcomings in primary health care.

### Method

During the period March-May 1990, 1,000 consecutive patients attending the North Riding Infirmary ENT Casualty were studied. While waiting to be seen each patient was asked to complete a questionnaire (Table I) concerning the request for casualty treatment. Each patient was then seen by a junior doctor of Senior House Officer grade (Senior Intern) (two GP trainees and one career SHO as regular casualty staff) who suggested diagnosis and treatment. Where doubt arose, a Registrar's (Resident) opinion was sought either at the time of consultation or at morning review if patients attended overnight. All casualty records were reviewed by a consultant (LMF) within 48 hours of the visit and a subjective judgement as to the need for emergency treatment or appropriateness of referral was made. The junior doctor's decision to discharge, refer back to GP or refer on to the ENT Out-patient Department was reassessed on the clinical information. Records of subsequent clinic visits to the four consultants staffing the Out-patient Department were later examined (by LMF) to validate the casualty doctor's diagnosis and management.

### Results

One thousand completed questionnaires were available for study. Five patients refused to participate and 22 forms were inadequately completed or mislaid and are excluded from this total.

There was a slight male preponderance (males 522/ females 478) and a tendency for the younger age group to present (see Table II). Of 1,000 patients, only 16 were not registered with a general practitioner. Despite this, over half of the patients presenting (59 per cent) had not consulted their doctor prior to self-referral. Approximately three-quarters of the patients presented between 6 a.m. and 6 p.m. and only 13 patients attended casualty between midnight and 6 a.m.

The commonest presenting complaints are listed in Table III. Four conditions alone, generally accepted as classical ENT emergencies, made up 38 per cent of the cases: epistaxis, nasal fracture, foreign body in the ear and foreign body in the upper digestive tract. However, three relatively non-urgent complaints (deafness, sore throat

TABLE I  
 QUESTIONNAIRE COMPLETED BY PATIENTS

Casualty Survey	
No.:	.....
1. Name:	.....
2. Date:	/ /90
3. Time of Arrival:	.....
4. Age:	.....
5. M	F (please tick or ring)
6. Postal code:	.....
7. Employed	Unemployed Other (please ring)
8. Main complaint—reason for attendance:	.....
9. Duration of complaint:	.....
10. Have you seen your G.P. regarding your complaint?	Y N
a. If YES,	1. When did you last see your G.P.?.....
	2. Any treatment given by your G.P.? Y N
b. If NO,	1. Are you registered with a G.P.? Y N
	2. You wished to have a second opinion? Y N
	3. You find casualty more convenient than your G.P. surgery? Y N
	4. The wait for an appointment to see your G.P. is too long? Y N
	5. You have been referred from another casualty? Y N
	6. Any other reasons why you decided to attend casualty rather than consult your G.P.? Y N
Thank you for your help.	

TABLE II

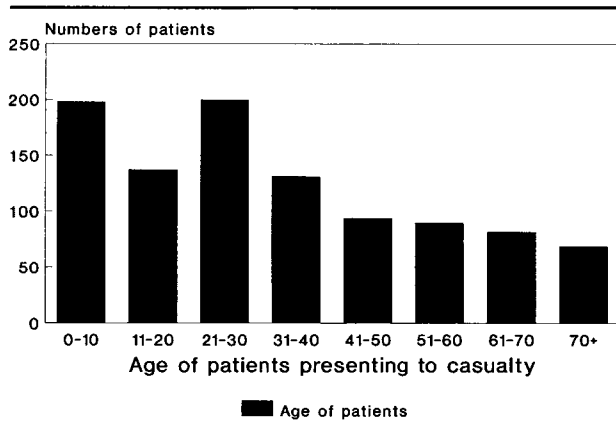
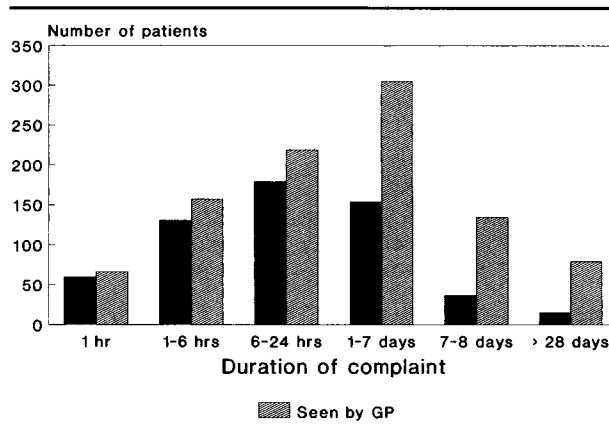


TABLE IV



and earache) comprised another 39 per cent. Earache was, notably, the commonest presenting complaint.

Chronic complaints proved common. In just over half of attendances (52 per cent) the symptoms were admitted to have been present for more than 24 hours (see Table IV) and in 8 per cent for over one month! The majority of patients (76 per cent) with long-standing symptoms (over one week) had previously consulted their G.P., although only 41 of the 162 patients in this group (25 per cent) had a referral letter.

The commonest final diagnoses are listed in Table V. The largest (18 per cent) group is made up of those patients in whom no clinical abnormality could be found by the SHO and registrar to explain the symptoms. A further 7 per cent presented with wax impaction and 14 per cent with otitis externa. Other notable groups included those with CSOM (4 per cent), acute tonsillitis/pharyngitis (5 per cent), acute middle ear infection (5 per cent), and OME (2 per cent). Malignancy was diagnosed in four patients and cholesteatoma in six. At review of the casualty records, the senior author (LMF) concluded that approximately half of the patients could have been treated by a GP with a reasonable knowledge of ENT management. Such an assessment is highly subjective, but probably represents an underestimate. Only 9 per cent of patients had required emergency admission and 4 per cent further evaluation in the routine ENT clinic. The remainder, 85 per cent, were managed solely by the casualty doctors, two of whom were GP trainees.

Patients gave a variety of reasons for attending ENT Casualty rather than their GP. Two hundred and sixty two found it more convenient because of the site and 24 hour open access. A further 221 felt their condition merited urgent treatment and were discouraged by the wait for consultation with their GP. Ninety-two patients had consulted their GP but felt the need for a second opinion; one oesophageal and one laryngeal malignancy, and three cholesteatomas were diagnosed in this dissatisfied group.

TABLE III  
COMMONEST PRESENTING SYMPTOMS

Sore throat	93 (9%)
? Foreign body, throat	87 (9%)
Earache	225 (23%)
Deafness	72 (7%)
? Foreign body, ear	64 (6%)
Nasal fracture	52 (5%)
Epistaxis	178 (18%)

Discussion

Recent years have seen the closure of many specialist ENT hospitals and their absorption into the larger scale District General Hospitals. Individual units such as the Royal Ear Hospital (founded in 1816), the Birmingham and Midland Ear, Nose and Throat Hospital (1845-1989), and the Royal National Throat, Nose and Ear Hospital, Golden Square (1863-1985) have been the subject of obituaries (Shaw, 1987; Nigam *et al.*, 1989). ENT emergencies are usually seen in a general Accident and Emergency Department (Casualty), and filtered before referral on to the specialists.

This study was undertaken to examine the workload of an open access ENT Casualty service, to evaluate the appropriateness of patients self-referral patterns and to determine what proportion of patients could have been adequately treated by a competent GP.

Despite a sign at the entrance to casualty insisting on a referral letter where symptoms had been present for over 24 hours, only 25 per cent of patients with symptoms persisting over one week had such a letter. Indeed, the majority of patients (59 per cent) had at no time consulted their GP prior to self-referral.

Many studies of general Accident and Emergency (Casualty) Departments have examined the public's use and misuse of the service. A preference for the hospital casualty service might have been understandable prior to the introduction of the National Health Service (1948), when many hospitals provided free or subsidized services while the family doctor charged on an item-for-service basis (Wood and Cliff, 1986). Yet, 30 years ago, Crombie (1959) estimated that 61 per cent of such attenders could still have been adequately treated by their GP and that the preference for the Casualty Department resulted from:

- the 24 hour availability compared with the fixed consultation hours of the GP.
- a possible short-cut to an out-patient clinic.
- the chance to be seen during working hours at the employer's expense rather than during leisure time!

TABLE V  
COMMONEST FINAL DIAGNOSES

Ear wax	74
Foreign body, ear	58
Otitis externa	138
Acute otitis media	49
No abnormality detected	178

To this might be added the patient's perception that their condition requires special facilities or expertise which the GP lacks, a deciding factor in 42 per cent of patients with minor ailments presenting to a general Casualty Department (Wood and Cliff, 1986).

Driscoll *et al.* (1987) noted that patients were very poor at assessing the urgency of their presenting complaint. In 40 per cent of their patients, GP treatment or no treatment at all was considered more appropriate. Of casualties who graded their symptoms as requiring 'urgent' attention, 21 per cent would have been better treated by their GP. Disturbingly, 14 per cent of those categorizing their condition as 'non-urgent' did indeed need the services of the A and E Department. If the patient's opinion seems unreliable, so, unfortunately, does the duration of symptoms. A 24 hour threshold as attempted in our department does not safely discriminate the truly urgent conditions. In a general Casualty Department, Driscoll *et al.* (1987) found that 11 per cent of patients with symptoms of longer duration still needed its services. In our study, 52 per cent of patients admitted to symptoms exceeding 24 hours, and in view of the advertised department policy, this is likely to be an underestimate. Although this 'chronic' group were more likely to have consulted their GP (Table IV) it was still estimated that 45 per cent had conditions usually treatable by a non-specialist doctor, including 156 patients with no evident ENT pathology.

This situation may not reflect the desires of the GP as shown by only 25 per cent of patients with symptoms persisting over one week, presenting with a referral letter. Morrison *et al.* (1990) determined that most GPs feel that patients presenting to a general casualty for a second opinion without a GP referral should be redirected to their surgery. In ENT practice this seems not unreasonable. An experienced GP should have had significantly greater exposure to ENT pathology than the average SHO, many of whom indeed are GP trainees themselves. However, this risks turning away serious disease and in our study would have returned two patients with malignancy and six with cholesteatoma.

Our study did not investigate casualty review patients. Again a study by Milner *et al.* (1991) has identified a six-fold variation in booked reattendance rates in eight general Accident and Emergency Departments. This discrepancy was partly attributable to differing organizational policy and artefact, but also reflected regional variations in the quality of primary medical care.

This study has demonstrated that an open access 24 hour ENT casualty service:

- can provide a useful second opinion to GPs for truly urgent cases.
- is heavily burdened with inappropriate self-referrals by patients who chose for varying reasons to seek hospital advice and could have been adequately treated by their GP.
- does identify a small proportion with serious chronic pathology currently being missed by primary medical care.

Most publications accept the impracticality and hazards inherent in restricting access to casualty. Indeed, Driscoll *et al.* (1987) argue that a measure of 'misuse' of casualty service is inevitable or even acceptable and that the role of the department should be broadened. More contro-

versially, they suggest that the need for financial support might be met by redistribution of resources from GP services. In 40 per cent of their workload, they felt that their Casualty Department was doing the work GPs are paid to perform! (Driscoll *et al.*, 1987).

Appropriate use of an open-access casualty department dealing with ENT emergencies requires:

- better training of General Practitioners.
- improved feedback on indications for referral.
- education of the patient.

A postal survey of GPs (Veitch *et al.*, 1992) has demonstrated an unmet demand for further training in ENT; 85 per cent sought postgraduate training through attending courses, lectures or consultant clinics. There was less enthusiasm, shown by only 13 per cent, for a formal attachment as an SHO to an ENT unit. Such posts are, however, considered more attractive when rotating with other specialities such as ophthalmology and dermatology, in a Vocational Training Scheme. The supervised staffing of a specialized casualty service is then of far greater educational value to such trainees than time spent in routine hard work or observation of theatre operating lists.

Certainly an increased emphasis on ENT training for medical students and GP trainees is suggested by our study. GP trainees (with three months ENT experience at the start of the study) reliably diagnosed serious pathology and dealt with emergencies either overlooked or never referred to their senior colleagues in primary health care.

#### Acknowledgements

The authors are grateful to the staff of the North Riding Infirmary Casualty Department for their assistance in this study, and to Janet Pye of the North Riding Infirmary Research Foundation for her secretarial help.

#### References

- Crombie, D. L. (1959) A casualty survey. *Journal of the College of General Practitioners*, **2**: 346–356.
- Driscoll, P. A., Vincent, C. A., Wilkinson, M. (1987) The use of the Accident and Emergency Department. *Archives of Emergency Medicine*, **4**: 77–82.
- Milner, P., Beeby, N., Nicholl, J. (1991) Who should review the walking wounded? Reattendance at Accident and Emergency Departments. *Health Trends*, **23**: 36–41.
- Morrison, W. G., Pennycook, A. G., Makower, R. M., Swann, I. J. (1990) The General Practitioner's use and expectations of an accident and emergency department. *Journal of the Royal Society of Medicine*, **83**: 237–240.
- Nigam, A., Campbell, J. B., Brain, D. J. (1989) The Birmingham and Midland Ear, Nose and Throat Hospital—An obituary. *Journal of Laryngology and Otology*, **103**: 815–818.
- Shaw, H. J. (1987) The life and times of the Institute of Laryngology and Otology. *Journal of Laryngology and Otology*, **101**: 15–21.
- Veitch, D., Lewis, M., Gibbin, K. (1992) General practitioner training in ENT in the Trent Region. *Journal of the Royal Society of Medicine*, **85**: 156–158.
- Wood, T. C., Cliff, K. S. (1986) Accident and Emergency departments—why people attend with minor injuries and ailments. *Public Health*, **100**: 15–20.

Address for correspondence:

L. M. Flood,  
North Riding Infirmary Research Foundation,  
Newport Road,  
Middlesbrough,  
Cleveland TS1 5JE.

**Key words:** Emergency Service, hospital