

Surgical emergencies in general practice

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SUMMARY. Two thousand and thirty patients were seen in their own homes between 19.00 hours and 07.00 hours during a 14-month period. Twenty-nine per cent of these visits were for surgical conditions and a detailed analysis of this group is presented. An attempt to assess the necessity of the visit by grading them into minor, intermediate, and severe is also made. No attempt is made to discuss the treatment of individual conditions. The high admission rate to hospital probably reflects the uncertainty of further home follow-up.

Introduction

THE deputizing services provide a unique opportunity to study emergency medicine in the home. A large series of patients can rapidly be collected. Two previous studies (Gabriel, 1976; Lockstone, 1976) have been made but in each case of a much smaller group of patients.

Aim

The aim of this study was to assess the number of calls for surgical conditions I made when I was working for a general practitioner deputizing service in the London and Greater London area, and then to analyse this group further. I also sought to establish the necessity for the visit.

Method

I accept the difficulty of dividing calls into surgical conditions and medical conditions. I have included among surgical conditions all those conditions which, had a second opinion been requested, a surgeon could have been asked to see. I have also included those patients who had acute orthopaedic or gynaecological conditions. I made no attempt to assess the social class

of the groups seen, or to analyse the treatment of specific conditions. I considered initial treatments given with arrangements made for subsequent treatment and kept records of all patients admitted to hospital. I tried to contact the hospital after admission to assess the final outcome. I also recorded the time of night at which visits were made.

I graded the visits into minor, intermediate, and major. A minor visit was one which I considered did not require emergency treatment, or one for which medical advice could have been delayed until the following morning, or where the problem, if it really existed, would have resolved itself anyway. An intermediate group were defined as patients whose condition required treatment and for which delayed treatment would have resulted in a further deterioration of their condition but without necessarily being life-threatening. Examples of patients included in this group were the patients with mild asthma, urinary tract infections, and children with otitis media. The major group were defined as those patients who required either intensive treatment followed by hospital admission or urgent direct hospital admission. These included some of the surgical emergencies, patients with cardiac conditions, severe asthma, and those who had taken overdoses.

Results

A total of 2,030 visits were made for the conditions listed in Table 1. Only the main groups have been listed and 32 per cent of the calls, which were for a variety of minor complaints, are listed as miscellaneous. Out of the 2,030 visits performed, 1,248 were considered to be minor, 572 intermediate, and 270 major. Table 2 shows the time of night at which the visits were made.

Of patients treated at home, 1,542 had definitive treatment and no arrangements were made for follow-up. A further 229 were treated and arrangements made for their general practitioner to revisit the following day with a view to further assessment and/or to continue treatment. Two hundred and fifty-nine patients were admitted to hospital via the Emergency Bed Service or directly through a casualty department.

Table 1. Number of patients and conditions for which they were seen.

	Number	Percentage
Abdominal pain	514	25.4
Upper respiratory tract infection	446	21.9
Cardiac condition	124	6.2
Mental condition	117	5.7
Back pain	78	4.4
Acute ear infection	83	4.0
Miscellaneous	658	32.4
Total	2,030	100

Surgical patients

Five hundred and ninety-six visits were made for surgical conditions which included acute orthopaedic and acute gynaecological problems. The largest group of patients were those complaining of vague abdominal pain, vomiting, and diarrhoea. One hundred and sixty-four visits were made for this condition and although the symptoms varied from trivial to severe no admissions were made during the study period. It must, however, be remembered that under some circumstances hospital admission may be required, particularly in the case of very young children. This group of patients were treated conservatively at home and were advised to contact their general practitioner if the condition did not settle.

Of 83 patients who were seen with a provisional diagnosis of ureteric colic, hospital admission was arranged for 21. The decision to admit to hospital was made after considering the duration of symptoms and severity of the pain.

Fifty-six patients had a clinical diagnosis of appendicitis and arrangements were made to admit these to hospital. Forty-four patients underwent appendectomy within the first 24 hours. The remaining 12 were not followed up and either had a delayed appendectomy performed or, in most cases, were sent home with an unconfirmed diagnosis.

Thirty-six patients were seen with mild trauma which usually involved joint injuries. The majority of these were seen and sent to the local accident and emergency department for further diagnosis and treatment. No patients with major trauma were seen and presumably these went directly to the hospital departments concerned.

Thirty-five patients were seen with acute back pain of skeletal origin. Four of these had acute neurological signs in the lower limbs and were admitted to hospital for orthopaedic opinions. The remainder were treated with analgesics and bed rest.

Of 34 patients with acute abdominal pain not thought to be due to colic, only six were sent to hospital for further treatment and investigation. These included two

with possible pancreatitis and four with possible biliary colic/cholecystitis. Those who were not admitted to hospital were advised to see their general practitioner in the morning if the pain persisted, or if the pain increased, to request a further visit.

Twenty-two visits were made for ano-rectal conditions which varied from acute prolapsing haemorrhoids and perianal abscesses to pruritus ani. Only four of these patients required emergency hospital admission, three for draining of abscesses and one for treatment of strangulated haemorrhoids.

Two patients were seen with bleeding varicose veins for which bandages were applied and no further emergency treatment was given. Those two patients were advised to see their general practitioner with a view to definitive surgery.

Four patients were seen with postoperative pain, three of whom had wound pain and one of whom had an abdominal dehiscence. This last patient was readmitted to the hospital where the operation had been performed. The remaining three were treated with analgesics.

Of the gynaecological emergencies, six visits were for antepartum haemorrhage and all six were admitted to hospital. No use was made of the Flying Squad but urgent admission was arranged. The largest gynaecological group of emergencies were patients complaining either of threatened or inevitable abortion. Thirty-six patients were seen with threatened abortions, nine of whom were admitted to hospital. Twenty-one patients were seen with inevitable abortion, of whom only 18 were admitted to hospital. The other three either refused to go or had had spontaneous abortions before my arrival. Eight patients were seen with possible ectopic pregnancies of which six were subsequently confirmed. The remaining two were doubtful and lost to follow-up. There were 11 other visits for varying gynaecological conditions ranging from dyspareunia to Bartholin's abscess. One visit was made for a girl having a normal period.

Discussion

No conclusions should be drawn from this study in relation to the number of visits performed at certain times during the night, since during busy periods more relief doctors were employed and the study relates only to the visits made by one doctor.

Table 2. Time of day at which patients were seen.

Time of call	Number of patients	Percentage
Before 20.00 hours	176	8.6
20.00 to 23.00	947	46.6
23.00 to 24.00	347	17.0
24.00 to 02.00	311	15.4
02.00 to 07.00	249	12.4

Sixty per cent of the visits were made for minor ailments and, with certain reservations, were probably unnecessary. One difficulty was that different social classes make differing demands on their general practitioners. Gabriel (1976) found only 14 per cent of home visits to be medically essential. In this study many cases in the intermediate group of conditions would be judged by his criteria to be medically non-essential. The problem arises because a deputizing practitioner cannot refuse a visit once requested. There is no doubt that the patient's own general practitioner, fully aware of the circumstances, may be able to offer advice and thus avoid a visit.

A recent editorial in the *British Medical Journal* (1978) suggested the increasing use of the telephone in general practice for advice. Although no record was made during this study, many of the visits could have been avoided with the patients' approval if they could have spoken to a doctor on the telephone. The inference is that any deputizing service will perform more visits per practice than the general practitioners concerned, first because the calls are usually not taken by a doctor and secondly because the patients are unknown to the deputizing doctor.

Twelve per cent of the visits for all conditions resulted in hospital admission. Twenty-nine per cent of the visits were for surgical conditions and this resulted in an admission rate of 22 per cent. The relatively large number of patients seen with ureteric colic and a very high admission rate poses an interesting problem. This is an extremely common condition but why do so many patients require hospital admission in view of the relatively small number who subsequently come to surgery? In this series about 25 per cent of patients seen with a presumed diagnosis of ureteric colic were ad-

mitted to hospital. The reasons for admission were severe pain and the fact that the symptoms had persisted for more than a few hours, plus the impracticability of providing adequate pain relief otherwise. To provide adequate pain relief in some circumstances would have required repeat visits to give parenteral injections. Repeat visits by deputizing practitioners are not popular and are actively discouraged. Hence, if there was any doubt about a patient requiring further analgesia, the patient tended to be admitted to hospital.

Appendicitis is a common surgical emergency and in this series represented about two per cent of all the visits performed and about 20 per cent of all hospital admissions arranged. The difficulties in making a diagnosis are well known, and as many as 20 per cent of those patients admitted with suspected appendicitis were subsequently discovered to have another condition. Presumably, a number of patients seen complaining of colic and treated with fluids, antispasmodics, and reassurance may subsequently have been discovered to have appendicitis.

The reason for the low number of acute surgical emergencies seen in this series could be explained in one of two ways. First, it is possible that patients with acute surgical conditions present directly to accident and emergency departments without calling their general practitioner, and secondly, the condition is much rarer than was originally thought. There is no doubt that the incidence of acute perforations from peptic ulcers is now much rarer than it was 20 years ago. This is perhaps due to better treatment and earlier elective surgery. The same presumably applies to many other conditions which used to present acutely, such as strangulated herniae.

It would be interesting to know what proportion of

Table 3. Surgical conditions (total number of cases 596).

	Number of diagnosis	Percentage of total diagnosis	Number of admissions	Percentage of admissions
Gastroenteritis	164	27.5	0	0
Ureteric colic	83	13.9	21	3.5
Urinary tract infections	78	13.2	0	0
Appendicitis	56	9.4	56	9.4
Trauma (minor)	36	6.0	*	*
Acute back pain	35	5.9	4	0.7
Acute abdominal pain	34	5.7	6	1.0
Ano-rectal	22	3.9	4	0.7
Bleeding varicose veins	2	0.3	0	0
Postoperative pain	4	0.7	1	0.2
<i>Gynaecological emergencies</i>				
Antepartum haemorrhage	6	1.0	6	1.0
Threatened abortion	36	6.0	9	1.5
Inevitable abortion	21	3.5	18	3.0
Ectopic pregnancy	8	1.3	8	1.3
Miscellaneous	11	1.8	0	1.8

*Seen in local accident and emergency departments.

patients went directly to a hospital accident and emergency department without consulting their general practitioner. Many patients say that if the condition is serious they go directly to hospital but if it is not they contact their general practitioner.

Gynaecological emergencies form a large group of the surgical patients seen and this group in particular has a very high admission rate. Only 25 per cent of patients complaining of a threatened abortion were admitted to hospital yet in those patients with an inevitable abortion the admission rate was considerably higher.

In conclusion, surgical emergencies form one of the most common subgroups of visits performed by a deputizing general practitioner and they result in a very high rate of admission to hospital. No conclusions can be drawn as regards emergency treatment of these conditions as opinions are bound to vary. There is, however, a marked tendency on the part of the deputizing general practitioner to admit patients to hospital because he lacks the facility for continued follow-up.

References

- British Medical Journal* (1978). The telephone in general practice. Editorial, 2, 1106.
 Gabriel, R. (1976). Emergency call service. *Journal of the Royal College of General Practitioners*, 26, 74-75.
 Lockstone, D. R. (1976). Night calls in a group practice. *Journal of the Royal College of General Practitioners*, 26, 68-71.

Continuation therapy with amitriptyline in depression

Thirty-two patients who had responded to amitriptyline (150mg daily), when suffering from a depressive illness were allocated either to receive placebo or to remain on the same medication for one year.

Plasma concentrations of the drug were regularly estimated. There was no correlation between plasma concentration and subsequent residual affective morbidity. In spite of considerable encouragement, three of the patients did not take the prescribed amitriptyline and they all relapsed. Five out of 16 patients who received placebo relapsed. None of the patients who continued to take amitriptyline relapsed.

It is emphasized that the patients studied were selected, inasmuch as they were apparent responders to amitriptyline. It is concluded that this group of patients should continue to be treated with antidepressant medication for eight months after apparent recovery, and care should be taken to ensure the patients' compliance.

Reference

- Coppen, A., Ghose, K., Montgomery, S., Rama Rao, V. A., Bailey, J. & Jorgensen, A. (1978). *British Journal of Psychiatry*, 133, 28-33.

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