

LETTERS

GP workload in nursing homes <i>Robert A Andrew</i>	501	Management of angina <i>Manish M Gandhi and David A Wood</i>	504	Teenage sexual health <i>Trevor Stammers</i>	506
Delay in cancer diagnosis <i>John B Williamson</i>	501	Fourth national morbidity study <i>Roy Carr-Hill and Nigel Rice</i>	505	GPs' low morale <i>Bill Reith</i>	507
Pneumococcal sepsis in a splenectomized patient <i>E L C Ong, et al</i>	502	Immunization: precautions and contraindications <i>George Kassianos</i>	505	Art of communication <i>David Williams and Jacquie Williams</i>	507
Warfarin in stroke prevention <i>Stephen Morgan and David Mant; Kieran Sweeney, et al</i>	503	Urinary tract infection in children <i>Darryl Tant</i>	506		
Acute myocardial infarction <i>John Rawles</i>	504	Complementary medicine — a definition <i>E Ernst, et al</i>	506		

Note to authors of letters: Please note that all letters submitted for publication should be typed with *double spacing*. Failure to comply with this may lead to delay in publication.

GP workload in nursing homes

Sir,
An extended study from 1984 to 1991 confirmed the findings of my original study that general practitioner consultation rates among 42 residents in a nursing home for elderly people were about 40% higher than consultation rates among other practice patients aged 65 years and over.¹ There are 10 separate nursing homes in the same geographical area. In 1987 I took over the medical care of another similar sized nursing home in the complex and pooled the statistics from the two homes for a workload study from 1987 to 1991.

The workload generated by nursing home residents and other practice patients is shown in Table 1. The 15 nursing home residents in the 65–74 years age group had a mean annual consultation rate which was 83% higher than that for practice patients in the corresponding age group while the consultation rates for the 75 years and older cohorts were approximately the same. The mean annual consultation length per patient is a useful index of practice workload and showed that the younger nursing home residents required

91% more work than their equivalent practice age group. The rates for those aged 75 years and over were the same. The younger nursing home residents were referred for hospital services approximately twice as often as practice patients in the same age group.

Between 1987 and 1991, the prescribing rates for 10 nursing homes and one residential home cared for by the practice varied from 36 to 68 items annually per patient. This compared with 21 items for practice patients aged 65 years and over. The mean annual prescribing rate per patient for the whole practice excluding residents in the nursing homes and the one residential home was seven items.

Increased workload has been reported from practices with large numbers of nursing home residents.² From the present study it seems that the increase is in the younger age group of patients (65–74 years). My impression is that these patients suffer from severe forms of degenerative disease and dementia and are receiving nursing home care because they are unable to manage or be cared for in their own home. They require a considerable input of medical care. The problems for those in the older age group (75 years

and over) may be the result of exaggerated ageing processes and less virulent forms of disease, including the dementias, which synergistically become sufficiently severe to require assistance with everyday existence, especially if living alone. These patients may require nursing care rather than medical care.

ROBERT A ANDREW

2 Wansfell Holme
Windermere
Cumbria LA23 1LS

References

- Andrew RA. Analysis of a general practitioner's work in a private nursing home for the elderly. *J R Coll Gen Pract* 1988; **38**: 546-548.
- Green PA. General practitioners' workload in nursing homes [letter]. *J R Coll Gen Pract* 1989; **39**: 173.

Delay in cancer diagnosis

Sir,
A degree of delay is inevitable between the development of a cancer and its diagnosis. The general practitioner has an important role in keeping this delay to a minimum.

A study was undertaken looking at the second phase¹ of cancer diagnosis in general practice, that is, between the patient's first presentation with symptoms of malignancy and the general practitioner making a referral. The aim was to look at the factors that contributed to a delay in cancer diagnosis.

In a Suffolk practice of 10 800 patients, the computerized database was searched to identify all patients with a history of cancer. Their notes were reviewed to identify episodes of delay of more than four weeks' duration between presentation and referral. Reasons for the delay were noted and categorized by J W.

A total of 376 patients in the practice had a history of cancer and had notes suitable for analysis. Inspection of the notes revealed 53 cases of delay; the associated factors are shown in Table 2. In many cases several delay factors were identified.

Table 1. Workload generated by residents of nursing homes and other practice patients, 1987–91.

Care group	Mean annual consultation rate per patient	Mean length of consultation (minutes)	Mean annual consultation length per patient ^a (minutes)	Mean annual referral rate per patient
65–74 years age group				
Nursing home residents (<i>n</i> = 15)	8.4	8.9	74.8	0.5
Other practice patients (<i>n</i> = 248)	4.6	8.5	39.1	0.2
75+ years age group				
Nursing home patients (<i>n</i> = 68)	7.6	8.9	67.6	0.4
Other practice patients (<i>n</i> = 160)	7.9	8.5	67.2	0.4
Practice patients aged <65 years (<i>n</i> = 2344)				
	3.2	8.5	27.7	0.1
Whole practice population (<i>n</i> = 2835)				
	3.8	8.6	32.7	0.2
Practice excluding nursing home residents (<i>n</i> = 2752)				
	3.6	8.5	30.6	0.2

n = mean number of patients each year. ^aConsultation rate x consultation length.

Table 2. Factors associated with delay of more than four weeks' duration (for 53 patients) between presenting to their general practitioners with symptoms of malignancy and the GPs making a referral.

Delay factor	No. of occurrences
Gradual evolution of symptoms or signs	16
Symptoms treated as benign	15
Patient aged less than 50 years	13
Reassurance by negative results of investigations ^a	9
Patient delay after presentation	5
Presentation with metastases	5
History of similar benign symptoms	5
Other medical problem	5
Patient aged over 85 years	3
Slow diagnostic process ^b	2

^aFor example, negative test result at stage at which undertaken, or inappropriate test to identify disease. ^bFor example, abnormal test result led to a series of tests.

More than four weeks from the patient's first attendance was chosen arbitrarily to signify delay. While acknowledging that delay for various types of cancer will have different prognostic significance, the intention of the study was to identify why general practitioners may not recognize a malignancy within a reasonable time.

Most of the causes observed were those found by other studies² although, apart from Gray,³ most researchers have considered one class of tumour and the causes of its delay. Delays in this study did not occur when patients presented with standard symptoms and were not associated with failure to examine.⁴⁻⁶ Here patients aged under 50 years were more likely to experience delay than older patients presenting with similar symptoms. Although some tumours in younger patients may be more difficult to identify,⁷ in the cases in the present study the general practitioner did not appear to be expecting a malignant cause for the symptoms.

Numbers in an individual practice are unlikely to be large enough to produce statistically significant conclusions, and a multicentre study to look at delays in general practice cancer diagnosis may be worthwhile.

JOHN B WILLIAMSON

PO Box 87-174
Meadowbank
Auckland 5
New Zealand

References

- MacAdam DB. A study in general practice of the symptoms and delay patterns in the diagnosis of gastrointestinal cancer. *J R Coll Gen Pract* 1979; 29: 723-729.
- Ginzler M, Pritchard P, Mant D. Delay in diagnosing and treating cancer. Part 2: reasons for, and avoidance of, delay. *Oncol Pract* 1993; 1: 4-10.
- Gray DJP. The role of the general practitioner in the early detection of malignant disease. *Trans Hunterian Soc* 1966; 25: 135-179.
- Holliday HW, Hardcastle JD. Delay in diagnosis and treatment of symptomatic colorectal cancer. *Lancet* 1979; 1: 309-311.
- MacArthur C, Smith A. Delay in the diagnosis of colorectal cancer. *J R Coll Gen Pract* 1983; 33: 159-161.
- Springall RG, Todd IP. General practitioner referral of patients with lower gastrointestinal symptoms. *J R Soc Med* 1988; 81: 87-88.
- Lannin DR, Harris RP, Swanson FH, et al. Difficulties in diagnosis of carcinoma of the breast in patients less than fifty years of age. *Surg Gynaecol Obstet* 1993; 177: 457-462.

Pneumococcal sepsis in a splenectomized patient

Sir,

Asplenic individuals are known to be at a higher risk of developing serious and potentially fatal sepsis.¹ Prophylactic measures are generally recommended for the first few years post-splenectomy.² We report a case of severe pneumococcal sepsis occurring more than 10 years post-splenectomy.

A 21-year-old man was admitted to hospital as an emergency with a 48-hour history of headache, neck stiffness, double vision, vomiting and diarrhoea. Fourteen years previously he had had an emergency splenectomy following a road traffic accident. He was not on prophylactic antibiotics and had not received pneumococcal vaccine.

On examination he was confused and febrile. Neurological examination revealed marked photophobia, neck stiffness, nystagmus and diplopia. As pneumococcal sepsis was clinically suspected, intravenous benzylpenicillin 2.4 g was given immediately. A computerized tomography brain scan undertaken before lumbar puncture was normal. Cerebrospinal fluid analysis showed the white blood cell concentration to be 71 mm³ (polymorphs 76%, lymphocytes 24%), glucose <0.5 mmol l⁻¹ (plasma glucose was 7.5 mmol l⁻¹) and protein 1.6 g l⁻¹. Numerous gram-positive diplococci were seen on microscopy. Pneumococci were later grown from both cerebrospinal fluid and blood.

Intravenous cefotaxime (2 g eight-hourly) and oral dexamethasone (4 mg six-hourly) were started, the latter being stopped after four days. Over the next 24 hours the patient began to improve but developed neurosensory hearing loss. On the sixth day after admission he developed a right hemiparesis. A repeat brain scan was normal. Cefotaxime was continued

for 14 days. A further head scan showed a non-enhancing, low-density area in the left basal ganglia suggestive of infarction. Cerebrospinal fluid examination was repeated and no organisms were seen or grown on culture. He gradually improved and was discharged to a rehabilitation unit. His major deficits were complete deafness in the right ear, mild hearing loss in the left ear and right hemiparesis with severe paralysis of the right arm and right foot. Following a four-week stay in the unit and continued physiotherapy thereafter, the patient was able to walk unsupported and to perform tasks of daily living.

Pneumococci are the commonest cause of sepsis in splenectomized individuals, accounting for up to 90% of such episodes.³ Patients can present with an acute, febrile illness and treatment with appropriate antibiotics must be instituted promptly to reduce mortality and morbidity. Patients are susceptible throughout their lives but susceptibility is much higher during the first 2-10 years after splenectomy,⁴ in children⁵ and in those who have had an elective splenectomy (especially for haematologic malignancies and thalassaemia) rather than emergency post-traumatic splenectomy.⁶

In view of our patient's experience, we suggest that lifelong prophylactic antibiotics should be given, rather than only for the first two years post-splenectomy. Phenoxymethylpenicillin (penicillin V) is the drug of choice. Amoxycillin, if tolerated, may be a good alternative, particularly in children as it protects against *Haemophilus influenzae* as well as *Streptococcus pneumoniae*. Erythromycin should be used for patients allergic to penicillin.

Polyvalent pneumococcal vaccine should be offered and preferably given at least two weeks before elective splenectomy. It should probably be repeated every five years.⁷ Vaccination in children aged less than two years may produce a poor antibody response. Meningococcal (groups A and C) and *Haemophilus influenzae* type b vaccines are also recommended. Patients should be warned of their increased risk of developing complications from malaria when travelling abroad, and should be advised to be meticulous with their antimalarial prophylaxis.

The above measures will not, however, completely prevent overwhelming sepsis⁸ and asplenic patients (and their medical practitioners) need to be aware of their increased susceptibility, the need for prompt antibiotic treatment for symptoms of infection and for urgent referral for expert medical assessment. Patients should be supplied with a medic-alert