thoroughly investigated if their disease is to be properly elucidated; and in addition they require intensive nursing and rehabilitation services to enable them to regain to the maximum degree their health and independence. Money invested in these activities is repaid by early discharge home and prevention of long-term hospital stay. The solution to the problem highlighted in the article might be a more even distribution of costs between the acute teaching hospitals and geriatric medicine, with consequent improvement in the capacity of both to meet the demands of the Health Service.

BERNARD ISAACS

University Department of Medicine,
Queen Elizabeth Hospital,
Birmingham

SIR,—It is interesting to find the article on "Geriatric patients in an acute medical ward" (6 December, p 568) under the heading of "Contemporary themes." Judged by the south-of-the-border standards it is somewhat anachronistic, and it is disturbing to my Scots genes to find such a time-lag in attitude. Even the diehard brigade of "acute physicians" in the south have sadly acknowledged that the contemporary need of the population is for simpler medical and nursing support, not for more and more high-powered technology. The medical conditions requiring heroic technological action and resources are now few and far between, with "overdoses" leading the small field.

The most vital information required for the proper evaluation of the research recorded in this article surely must be exactly how many "several instances of patients who would have benefited from the specialised resources" there were. What were the conditions that would have benefited and what became of these people? One would postulate that they were admitted to yet another high-resource hospital. While there is a superabundance of fully staffed high-resource beds chasing the very small number of patients fulfilling the criteria of need there will continue to be overspill into these beds of the vast majority of elderly disabled people who constitute the bulk of those in need of institutional support at the present time. Furthermore, while the simpler and, as the article points out, perhaps more appropriate accommodation is starved of staff and resources owing to the greedy demands of the large teaching hospitals the circle of deprivation will continue.

One's mind boggles a little to read that one of the 11 patients who remained in the ward after "medical care had been completed" is recorded as having died. Without the benefit of further qualification of the statement one would conclude that this person was misplaced in the company of 11 bed-blockers.

We are too slowly establishing basic priorities south of the border. Perhaps, having cleared the air a little and fortified by Sassenach example, Scotland can now leapfrog ahead of us into sanity, adapting provision on common-sense lines to match the contemporary needs of an aging, impoverished, and frequently ill-housed population whose needs and desires are mainly for support to live more effectively and com-

fortably, and die with some dignity, in a residence of their own choosing.

MONNICA C STEWART

Geriatric Unit,
Edgware General Hospital,
Edgware, Middx

SIR,—At a time of national economic collapse many will have been impressed by the arguments in the paper from the University Department of Medicine at Glasgow (6 December, p 568). One bed-week in the Western Infirmary now costs £178.60; at a local geriatric hospital it costs £49.01; in local authority accommodation it costs approximately £23. There is surely a clearcut case for rapid transfer of elderly long-stay patients from the acute to the geriatric ward and so on to old people's chronic sick accommodation, and for expanding provision of the latter without delay.

In implementing this policy, may I plead for doctors and administrators always to remember that we are dealing with human beings and not sacks of coal. There is a disturbing trend throughout the country to refuse the elderly admission to all acute beds except for major surgical emergencies. Nor is this exclusion limited to the old, the senile, and the chronically disabled. Recently my local district general hospital issued the horrifying directive that geriatric patients—defined as all those over their 65th birthday—are not to be admitted to the acute psychiatric ward at all. Today I read that admission to a coronary care unit at a hospital in the north of England is likewise limited to those under 65.¹

Such ruthlessness reflects a poverty of love rather than money. There was a time, not so very long ago, when I was proud to be working in the NHS, which was the envy of the world. Whatever has become of us?

CYRIL HART

Stilton, Peterborough

¹ *World Medicine*, 1975, 11, 105.

SIR,—I should like to comment on the article by Miss Christine McArdle and others (6 December, p 568). In the first place geriatric patients occupying beds in acute medical wards are probably there because there is a disproportion between the beds available to the over-70s and to the younger members of the community. It is, of course, erroneous to consider a long-stay patient in an acute medical bed as occupying an "expensive bed." She requires only board, lodging, and nursing care and makes no demands on expensive diagnostic and therapeutic services. The cost of maintaining her in bed therefore falls wherever she is.

However, the problem posed by Miss McArdle and her colleagues can be solved relatively simply if the following policy is adopted. All acute and urgent admissions of those over 70 should be under a geriatric physician. Their admission should be to beds where, of course, he can call promptly on the expertise of his specialised medical and surgical colleagues when appropriate. The causes of "geriatric admissions" are complex but the demand for a bed for an elderly patient is acute and urgent in about 80% of cases.

I have had past experience of operating a geriatric service in Wolverhampton on this basis. I believe, and my general practitioner colleagues and the community care services will, I think, confirm, that in consequence a geriatric situation considered desperate and irremediable became manageable. The waiting list was eliminated and patients who needed beds were promptly admitted. The requests from my medical consultant colleagues to transfer patients became negligible.

It may be that in some areas in order to operate such a system a few acute beds need be transferred from the specialised physician to the geriatric physician. I think that they and even more their juniors would benefit by contact with the geriatric physician as well as having more time to exercise their special skills. In teaching it is even more important. Medicine is about sick people. The medical teacher cannot leave the management of the confused, the incontinent, the incurable to someone else in another place while he teaches the current constructs of clinical science. A large slice of the practice medicine of the future is going to be the medicine of old age. It is to be hoped that medical teachers will rise to this challenge and not opt out.

P W HUTTON

Beckbury, Salop

SIR,—Is it not obvious to Miss Christine McArdle and her colleagues (6 December, p 568) that the services provided for the elderly are cheap, of poor quality, unattractive, inadequate, and inappropriate, and that the provision of acute medical beds is too great? As noted, elderly patients certainly do not stay in acute beds because they like them, nor would they come into them if something more appropriate was available.

It has been evident for a long time now that the acute bed has ceased to be relevant except in very limited areas of medicine. Our main therapeutic instrument now is, as it was in the past, the situation in which people are placed. By this I mean the structure of that situation, the people concerned with and bearing on that situation, the purpose for which the person concerned is living. This in practical structural terms means hospitals at home, sheltered housing, day centres, work centres, day hospitals, and a whole range of community services which many acute wards in teaching hospitals know very little about. The model needed is the effective living or the purposeful living model which calls for very different methods of understanding and outlook.

How do you recruit to geriatrics against the all-pervading acute-bed and teaching-hospital ethos? Just as important, how do you shift your finances from excessive technical provision to community services of quality for the elderly?

F ALLEN BINKS

Edgware General Hospital,
Edgware, Middx

Biopsy of nasopharynx as a staging procedure in Hodgkin's disease

SIR,—We were most interested in the finding by Dr A Björklund and others (29 November, p 517) of a high incidence of abnormal tissue on biopsy of the nasopharynx in cases of Hodgkin's disease in view of our recent

report of a series of 16 cases of Hodgkin's disease involving Waldeyer's ring.¹ In our series there was involvement of the nasopharynx in eight cases but, unlike the Swedish report, our cases were all ones in which biopsy of the nasopharynx was indicated by symptoms related to this area. In two of our patients the disease was primary in the nasopharynx; the other six had more widespread disease at the time of nasopharyngeal involvement. Seven of the eight cases were of the mixed cellularity type, the other showing a lymphocytic predominance type of change. None of our nasopharyngeal cases showed the epithelioid granuloma type of Hodgkin's change first described by Lennert and Mestdagh,² in contrast to our seven tonsillar cases, four of which showed this change; this observation suggests that tonsillar Hodgkin's disease may often be a separate form of the disease. The cervical nodes that were involved in these cases also showed this epithelioid appearance.

Although in our series the course of the disease process did not seem to differ from that of the general pattern of Hodgkin's disease, it is possible that the presence or absence of microscopical Hodgkin's disease in the nasopharynx of a patient with disease elsewhere might be clinically important. The usefulness of this investigation could be ascertained only by carrying out a series of biopsies of the nasopharynx on an unselected group of patients with Hodgkin's disease at the time of primary diagnosis and comparing the findings with those in other tissues and with the fate of the patient. A detailed report of the findings of Dr Björklund and his colleagues will therefore be awaited with interest.

Most cases of Hodgkin's disease present with enlarged lymph nodes. It is reasonable to postulate that the disease originates in Waldeyer's ring (an earlier station of the lymph node stream draining into the cervical lymph nodes) whether it spreads as a neoplasm or as a virus. The nasopharyngeal findings of Dr Björklund and his colleagues and of ourselves are compatible with this concept and suggest that histological study of the nasopharynx in Hodgkin's disease will also further our fundamental knowledge of the disease process.

L MICHAELS

Department of Pathology and Bacteriology,
Institute of Laryngology and Otolaryngology,
London WC1

GB TODD

Salisbury General Hospital,
Salisbury, Wilts

¹ Todd, G B, and Michaels, L, *Cancer*, 1974, **34**, 1769.

² Lennert, K, and Mestdagh, J, *Virchows Archiv (Pathologische Anatomie)*, 1960, **344**, 1.

Paraquat poisoning

SIR,—Fortunately the incidence of accidental paraquat poisoning in the United Kingdom seems to have receded, but the number of cases of deliberate self-poisoning with this chemical persists at a worrying level. Many of the people concerned are apparently unaware of the ultimate consequence of their acts.

An indication to prognosis can be derived from a relatively simple test on the urine. This test relies on the reduction of paraquat to a blue free radical by alkaline sodium dithionite. The reagent must be freshly pre-

pared by adding 10 ml of 1M sodium hydroxide (1 mol/l) to 100 mg of pure sodium dithionite. Aqueous paraquat standards are prepared containing 1.0, 5.0, and 10.0 mg/l ($\mu\text{g/ml}$) of paraquat ion and 2-ml aliquots of the sodium dithionite reagent are added to 10-ml volumes of the test samples and paraquat standards. Quantitation is by visual inspection and the test is sensitive to 1.0 mg/l ($\mu\text{g/ml}$) in clear urine. Since diquat is reduced to a green free radical, a green to blue colouration indicates Weedol ingestion.

If no colour change occurs (that is, the result is negative) it can be assumed that no significant quantity of paraquat is being excreted and accordingly that no toxic amount has been absorbed. Active treatment can then be withheld. On the other hand a colour change to some shade of green or blue, while being no absolute criterion, certainly points towards an unfavourable outcome. These people, we think, should definitely be candidates for treatment. The first purpose of this letter, therefore, is to urge the provision in all emergency departments of facilities for this test throughout the 24 hours.

Regrettably at this stage no form of treatment can be confidently recommended, although several possibilities are being actively pursued at various centres throughout the country, the immediate treatment involving prompt but careful gastric aspiration and lavage, after which 500 ml of a 30% suspension of fuller's earth BP together with 5% magnesium sulphate is left in the stomach. The intention is to minimise absorption in the manner demonstrated in the successful findings of experiments in rats.¹ Further details on this and the continuing treatment are available from this unit.

Animal experiments have also demonstrated that charcoal haemoperfusion produces both a good clearance of paraquat from the blood² and survival.³ In this unit, as well as in several others, we are now studying the effectiveness of that technique in patients. For this purpose we need to receive patients with the least possible delay following ingestion and the second purpose of this letter is to invite clinicians who are confronted with cases of this kind to telephone us at once with a view to their transfer (01-407 7600, ext Poisons).

ROY GOULDING
G N VOLANS
PETER CROME
B WIDDOP

National Poisons Information Service,
New Cross Hospital,
Poisons Unit,
London SE14

¹ Smith, L L, et al, *British Medical Journal*, 1974, **4**, 569.

² Maini, R, and Winchester, J F, *British Medical Journal*, 1975, **3**, 261.

³ Widdop, B, *Proceedings of Conference of the European Society for Artificial Organs, Berlin*, 1975, to be published.

Effect of smoking on carboxyhaemoglobin level in pregnancy

SIR,—Mr T G B Dow and his colleagues (1 November, p 253) report that there is a significantly greater rise in blood carboxyhaemoglobin (COHb) concentration in response to smoking a single cigarette in pregnant as opposed to non-pregnant women.

However, their study was confined to the second trimester of pregnancy and the subjects were instructed to puff every 40 seconds, inhaling as deeply as possible to a total of 10 puffs per cigarette.

I would like to point out that a different picture is obtained if subjects are allowed to smoke naturally. This approach was adopted in a longitudinal study of 10 pregnant smokers who were followed at 4-8-weekly intervals from 12-16 weeks of pregnancy to six weeks postnatally. The subjects were aged 19-30 years and had smoked 5-30 cigarettes daily for at least five years. At each attendance the subjects smoked one standard tipped cigarette (nicotine delivery 2.1 mg) in their "normal" manner. All tests were conducted at 9 am and the subjects had not smoked for 1½ hours before smoking the test cigarette. Details of subjects and procedure are described elsewhere. The number of puffs per cigarette decreased as pregnancy progressed from a mean of 14.66 ± 0.76 puffs per cigarette at 12-16 weeks (six subjects) to 11.4 ± 0.93 at 33-40 weeks (10 subjects). Postnatally, the number of puffs per cigarette rose to 12.9 ± 0.98 (10 subjects). However, in the same subjects there was no significant change in the nicotine obtained from the cigarette at different stages of pregnancy.

In some of these subjects (not always the same subjects at each stage of pregnancy) estimations of blood COHb were obtained immediately before and immediately after smoking. Blood was taken from finger-prick samples (after preliminary experiments which showed that finger-prick and venous blood samples gave identical results) and COHb was estimated by the method of Commins and Lawther.² The results from these few estimations showed that, like the puffing rate, the rise in COHb concentration after smoking decreased as pregnancy progressed, from $3.17 \pm 0.20\%$ at 12-16 weeks to $1.09 \pm 0.31\%$ at 33-40 weeks. Six weeks postnatally there was an increase to $1.80 \pm 0.34\%$. The changes in COHb while smoking are shown in the figure, along with the puffing and nicotine data from the same subjects.

These observations indicate that women alter their smoking behaviour during pregnancy. Other observations have shown changes in smoking behaviour during stress and relaxation³ and with different strengths