myocardial infarction so that any arrhythmia that developed could be treated promptly. However, there is evidence that hospital care may actually cause some of the arrhythmias that then have to be treated. More than 20 years ago Dr Klaus Järvinen¹ observed that a disproportionate number of patients dying in hospital after acute myocardial infarction did so during or shortly after ward rounds. That interaction with hospitals and staff can significantly affect a patient's heart rate and rhythm is also well documented.^{2,3}

Although no one would suggest that there is no place for specialised coronary care units it is tempting to speculate that they have to be so well equipped and expertly staffed to compensate for the arrhythmias precipitated by the fear and isolation experienced by a patient in hospital. A study comparing the incidence of arrhythmias after myocardial infarction at home and in hospital would be most interesting.

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¹ Järvinen, K A, *British Medical Journal*, 1955, **1**, 318.

² Thomas, S A, Lynch, J J, and Mills, M E, *Heart and Lung*, 1975, **4**, 746.

³ Lynch, J J, et al, *American Heart Journal*, 1977, **93**, 645.

Metoclopramide in young children

SIR,—Metoclopramide is frequently used for symptomatic relief of nausea and vomiting.¹⁻⁴ Toxic effects which are unpleasant and alarming are prevalent in children. The margin between therapeutic and toxic dosage is narrow and we would like to draw attention to the care necessary in prescribing metoclopramide and instructing parents in the administration of this drug by reporting two cases of children who required admission to hospital following "convulsions."

A 10-month-old child was prescribed metoclopramide 1 mg four times daily by her general practitioner, having presented with a two-day history of diarrhoea and vomiting. She received three doses within a 12-h period, after which she became hypertonic and exhibited intermittent opisthotonos.

A girl aged 2 years 9 months who had been vomiting for four days presented with generalised hypertonia, having had an oculogyric crisis. It became clear later that this child had been prescribed a metoclopramide paediatric liquid preparation (1 mg in 5 ml) at the onset of her illness and had received eight doses over 48 h followed by eight doses of a metoclopramide syrup preparation containing 5 mg in 5 ml which had been prescribed for her sister, who had similar symptoms.

In both of these children the effects lasted less than 24 h. Neither was treated actively for the side effects of metoclopramide.

The doses of metoclopramide these children had received were both in excess of the manufacturer's recommendations.⁵ The first child had merely received 3 mg in 12 h (0.6 mg/kg/24 h) compared with the manufacturer's recommendation of 0.5 mg/kg/24 h, while the second child had received initially 8 mg within 48 h in eight doses (0.33 mg/kg/24 h) and a further 40 mg in eight doses over the 48 h before admission (1.66 mg/kg/24 h).

In the second case the overdosage was due to parental confusion with the two different strengths of the preparations, which have an identical colour. It should be remembered that a four times daily or six-hourly prescription

may result in three doses being given in 12 h and five doses within the 24-h period. Particular care is required when prescribing metoclopramide preparations for children, as the extrapyramidal side effects may occur not only with an accidental overdose but also with very minimal overdosage, as demonstrated in the first case. The side effects may present as a "convulsion" and thus lead to an unnecessary hospital admission.

Instructions to parents should be clear and emphasis given to the care necessary to avoid exceeding the prescribed dose, particularly when different preparations of metoclopramide are present in the same house.

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¹ Melmed, S, and Bank, H, *British Medical Journal*, 1975, **1**, 331.

² Van Daele, M C, *Archives of Disease in Childhood*, 1970, **45**, 130.

³ Cochlin, D L, *British Journal of Clinical Practice*, 1974, **28**, 201.

⁴ Nimmo, W S, *Prescribers' Journal*, 1977, **17**, 90.

⁵ Association of the British Pharmaceutical Industry, *Data Sheet Compendium*, 1977, p 83. London, ABPI, 1977.

Housing, health, and illness

SIR,—I write to commend Dr J A Muir Gray's conclusion (8 July, p 100) that poor housing is a "major public health problem." In his work of medically assessing priority Dr Gray has five points available, but out of what total? Salisbury District Council's points scheme has 80 available points, of which a maximum of 20 are reserved for medical priorities. Although Dr Gray can spare only 30 minutes a day for housing, could he not adjust his points for urgency instead of allocating five to all alike?

Until April 1974 I was medical officer of health to three district councils and clinical medical officer to Wiltshire County Council. After reorganisation I, along with other doctors, was transferred to the Wiltshire Area Health Authority, being "latched on" half time to the district community physician for the Salisbury Health District. My non-clinical work, apart from occasions when I deputised for the DCP in office matters, consisted in assessing medical priority for housing. When I was district MOH the local authorities relied on me to assess such priority by personal visits. Sometimes more than one visit was needed, an evening visit being helpful especially when mental health was involved, as was common. Information from general practitioners, health visitors, social workers, or public health inspectors was helpful. A confidential copy of my assessment report was routinely sent to the GP. After transfer to the AHA I continued my housing priority assessments similarly.

Dr Gray's cases of "severe handicap" need answers to questions such as "Is there another person in the home to help?" (for example, emptying the commode of a bed-ridden elderly person); "Is there a home help or a home nurse attending daily?"; "Are children involved?" These essentials can be most quickly ascertained by a home visit, but if this is impossible reports from health visitors and social workers are needed before deciding to allocate 0-20 medical points.

Regarding "dampness," if house mites breed more freely, so do moulds or fungi, spores of which can cause respiratory and other

allergic illness. Otherwise my view about "dampness" being a "lesser factor" coincides with Dr Gray's.

My work in assisting the DCP phased out as younger medical help became available, but I am sorry that it is not now possible routinely to home visit but necessary to rely on GPs' reports. One hopes that if the GP could not pay a recent home visit he will have obtained reports from health visitors and/or social workers before making his recommendation to the housing medical officer.

F JOHN G LISHMAN

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SIR,—With reference to Dr J A Muir Gray's article (8 July, p 100) we would like to make the following comments.

Dr Muir Gray's observations and inferences are limited by the small number of applications which he received for rehousing on medical grounds in one year (612 cases). Our problems are much greater in that we receive over 10 000 applications for medical rehousing in Liverpool in a year, and from them 600 cases can be given priority on medical grounds and these alone are nearly equal to his total number of cases. In addition, applicants who are already in local authority housing (high-rise flats, etc) may receive medical points towards their transfer to more suitable local authority accommodation. The 6% of cases which receive medical priority may compete in some parts of the city with slum clearance cases and therefore their rehousing may be delayed.

Despite this, we still believe that medical intervention is effective and efficient. A community physician has to spend three hours a day dealing on average with 60 cases and at the end of the week he has to decide the 12 worst cases for priority decision from 300 cases, in addition to giving transfer points. This type of ceiling effect is necessary, particularly when one is faced with the problem of limited resources (and in fact a generous allocation by the council). We agree with Dr Muir Gray's recommendations for classes IV and V to some extent, but regarding class III we do not consider this to be a priority group as we believe that social and mental stresses are multifactorial in origin and rehousing alone may not solve the problem. Nevertheless, isolated social cases of extreme urgency have been given priority on medical grounds on some occasions.

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Screening for breast cancer

SIR,—While in no way wishing to dissociate myself from the statement on screening for breast cancer by the British Breast Group (15 July, p 175), which is a fair and factual account of what transpired at a meeting to review the subject at the Imperial Cancer Fund, I wish to make it clear that at least one member of the group believes that the case in favour of screening remains unproved. The basic assumption behind all efforts for the early detection of carcinoma of the breast is that the longer the cancer remains untreated the more likely it is to disseminate. It would therefore seem reasonable that detecting cancers during the phase when they are radio-