Low blood pressure is unlikely to be complication of dementia process

EDITOR,—Zhenchao Guo and colleagues report an association between low blood pressure and different types of dementia, including Alzheimer's disease.¹ Adults with Down's syndrome have a high prevalence of Alzheimer's disease²; they also have significantly lower diastolic and systolic blood pressures than the general population.³ We reviewed data from a five year prospective longitudinal study investigating aging in a cohort of adults with Down's syndrome to explore a possible association between low blood pressure and Alzheimer's disease.

Measurements of blood pressure and evidence used in making a diagnosis of Alzheimer's disease according to criteria in the *International Classification of Diseases* (10th revision)⁴ were available for 80 subjects aged over 45. Twenty one subjects fulfilled the criteria for Alzheimer's disease. The mean age of the group without dementia was 52.6 years and that of the group with dementia was 55.0 years ($t=0.32$, $P=0.75$). The mean systolic blood pressure was 109.5 mm Hg and 114.7 mm Hg respectively ($t=1.6$, $P=0.25$), and the mean diastolic blood pressure was 76.6 mm Hg and 75.9 mm Hg respectively ($t=0.32$, $P=0.75$). Thus there was no significant difference in either blood pressure between the two groups.

Incessant hypoperfusion due to persistent low blood pressure in adults with Down's syndrome may predispose to the development of neuropathological changes of Alzheimer's disease. We found no evidence, however, that low blood pressure is a complication of the clinical dementia process in people with Down's syndrome.

V P PRASHER
Senior clinical lecturer
J A BLAIR
Emeritus professor of chemistry

Department of Psychiatry,
University of Birmingham,
Birmingham B15 2QZ

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Providing intensive care

Criticisms of situation in Birmingham are unsubstantiated

EDITOR,—D F Bowden and D P Burke make inaccurate and unsubstantiated allegations about the organisation of intensive care beds in University Hospital Birmingham NHS Trust.¹ We are disappointed that they did not have the courtesy to check their facts before criticising a third party.

University Hospital Birmingham NHS Trust comprises two hospitals (Queen Elizabeth Hospital and Selly Oak Hospital) some 2.4 km apart. Across the trust there are 46 critical care beds: Queen Elizabeth Hospital has 34 (general intensive therapy unit, 10; liver intensive therapy unit, 6; cardiac intensive therapy unit, 6; and neurocritical care, 6 intensive therapy unit beds and 6 high dependency unit beds) and Selly Oak Hospital has 12 (general intensive therapy unit, 7; and trauma intensive therapy unit, 5). These beds are largely run by a trustwide anaesthetics

and intensive care directorate, although the specialist units relate to their specific directorates. We pride ourselves on the collaboration between our departments, which allows maximum flexible use of critical care beds by patients who require them. We need to support patients whose specific treatment requires back up from an intensive therapy unit, such as those having cardiac surgery, liver and cardiac transplantation, or vascular surgery and neurosurgery, in addition to patients who require intensive care, including those with burns, major trauma, and severe medical illness. There is no professional or managerial block to flexible use of these beds.

Bowden and Burke are wrong in almost all of their comments. We have a major investment in critical care facilities, and these facilities are used flexibly and fully. Like other large acute trusts we sometimes face pressure on intensive therapy unit beds, which prevents us from accepting all patients who would benefit from critical care. We are concentrating on the development of high dependency beds to complement our existing pool of intensive care beds. An increase in critical care beds may require additional resources as well as the optimum use of existing facilities.

JONATHAN MICHAEL
Medical director
RALPH HIBBERT
Clinical director, anaesthetics and intensive therapy unit directorate

JEREMY PLEWES
Clinical director, trauma, accident and emergency, and burns and plastics directorate

University Hospital Birmingham NHS Trust,
Birmingham B29 6JF

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Authors misinterpreted results of study that they cited

EDITOR,—D F Bowden and D P Burke's suggestion that the major injuries unit in Birmingham contributes to the current lack of provision of intensive care services in the city is based on incorrect facts and lack of understanding of the situation.¹ This is partly due to a misreading or a misinterpretation of a thesis that does not support their assertions.²

The number of patients admitted to the five bedded major injuries unit for intensive care over the past five years has been 305, 303, 277, 383, and 407. The unit not only admits patients with major trauma but also provides intensive care for patients admitted to the regional burns unit; other patients are admitted when need coincides with empty beds.

Over the past six months 146 patients have been admitted to the unit; the average bed occupancy has been 90% (range 81-101%). Eighty of these patients had major injuries, 31 had burns, and the remaining 35 needed general intensive care; in terms of bed days, trauma accounted for 61%, burns for 27%, and other cases for 12%. Some patients from other hospitals were included in this last figure when empty beds were available.

The authors quote Janjua's study as showing that there is no difference in outcome between patients admitted to an accident and emergency department and those admitted to a dedicated major injuries unit.² They do not mention that the aim of the study was to compare the outcome of two routes of admission that had occurred unintentionally. Except for one case, all patients in both series were finally treated in the major injuries unit. Analysis by trauma and injury severity score showed more unexpected deaths in the patients admitted through the accident and emergency department. These were investigated further, and it was shown that unnecessary

delays occurred. The recommendation that naturally arose was that patients are best treated by one team from admission onwards, so that delays and misunderstandings can be reduced to a minimum. No judgment regarding the number of intensive care trauma beds arises: the argument concerns only their most effective use.

E K ALPAR
Consultant orthopaedic surgeon
M KING
Consultant anaesthetist

University Hospital Birmingham NHS Trust,
Selly Oak Hospital,
Birmingham B29 6JD

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GPs' views of consultants' non-urgent referral of patients to other consultants

Time is wasted if GPs make the second referral

EDITOR,—S Bridger and S R Cairns present data on the different attitudes of fundholding and non-fundholding general practitioners to non-urgent referral of patients by one consultant to another.¹ One can speculate on the reasons for the difference between these results and those of a survey carried out in 1991, before the introduction of fundholding.² More important than the opinions of the general practitioners are the opinions of the patients, for whose benefit these referrals are made.

The consultant should make the referral only after discussion with, and with the consent of, the patient. For the general practitioner to interfere with that referral is for him or her not to respect the patient's autonomy. Referring the patient back to the general practitioner to decide on the appropriateness of the referral means that there could be a delay in the referral process; the letter from the consultant to the general practitioner or from the general practitioner to the second consultant could be lost; or the general practitioner might decide against the referral. Whatever decision the general practitioner makes, he or she will have to contact the patient by letter or telephone or see the patient to say whether the referral has been made and if it has not been, why not; otherwise the patient is uninformed and uncertain about his or her care. Either case entails extra work for the general practitioner and possibly an extra visit for the patient, and any referral is delayed.

Bridger and Cairns give two hypothetical scenarios, but this exaggerated process of referral and rereferral already happens sometimes, with potentially serious consequences for the patient. A diabetic retinopathy screening programme was set up, in which colour slide photographs were taken of the retinas of diabetic patients. The photographs were reviewed by a consultant ophthalmologist, and patients with an abnormality were referred to their general practitioner for referral to a consultant ophthalmologist.³ A letter lost in the post on either leg of the referral process or a decision by the general practitioner not to make the referral would be detrimental to the patient. In any event, there would be a delay until the patient received treatment.

General practitioners are the lynchpin of primary care and should be kept fully informed of what is happening not to their patients but to patients in their practice. Fundholding has not