DIPPERS AND NON-DIPPERS

Sir,—Systolic and diastolic blood pressures follow a circadian pattern in both normotensive and hypertensive individuals, values being lower at night than during the day. An inverse pattern has been reported in subjects with autonomic failure, and the elderly, who have a higher incidence of cardiovascular disease, may lose this diurnal variation. We report a group of hypertensive patients whose 24-h blood pressure differed from most hypertensive and normal subjects in not having a nocturnal dip.

Data from 123 consecutive patients who underwent 24-h ambulatory blood-pressure measurement (SpaceLabs 5300) were analysed. Circadian variation was defined as a difference of 10 mm Hg or more between mean daytime blood pressure (0801-2400 h) and mean night-time blood pressure (0001-0800 h). Patients were thus classified as "dippers" (102 patients, 82.9%) or "non-dippers" (21, 17.1%).

No significant difference between the two groups was found in age, sex, weight, daytime systolic or diastolic blood pressure, or medication. Non-dippers, however, had a significantly higher frequency of stroke (5/21, 23.8%) than dippers (3/102, 2.9% (p < 0.001).

Thus there is a group of patients whose 24-h blood pressure does not follow the normal circadian pattern and who may be at higher risk of cerebrovascular complications. We need to determine the prognostic and therapeutic implications of this finding.

Blood Pressure Clinic, Department of Clinical Pharmacology, St Stephen's Green, Dublin 2, Ireland.


Eoin O'Brien James Sheridan Kevin O'Malley

THE LANCET, AUGUST 13, 1988