Matters Arising

of beginning during nausea with lymphoma. 3 Hours.

Myasthenia gravis, although in inhibition within autoimmune diabetes patients. 89

presume with diabetes mellitus and dyslipidaemia. 1

in a study of 177 stroke victims and 177 age and sex matched controls. habitual snoring was found to be an independent risk factor for stroke with an odds ratio of 2.1. The relative risk increased, however, to 8.0 in patients in whom habitual snoring was associated with a history of nocturnal apnoea, hypersomnia, and obesity. In a series of 59 patients with acute cerebrovascular events sleep apnoea was present in > 50%. 7

Several physiological aberrations associated with obstructive apnoeas including hypoaxemia, cardiac arrhythmias, and pronounced variations in blood pressure and cerebral blood flow may contribute to the increased risk of stroke in patients with disordered sleeping breath.

Although it is not known if treatment of sleep apnoea reduces the risk of stroke, it seems to reduce vascular morbidity and mortality. 69 As sleep apnoea is a treatable condition, sleep apnoea and habitual snoring should be included in discussions of modifiable risk factors of stroke.

The basis for behavioural disturbances in dementia

In her editorial, The basis for behavioural disturbances in dementia, Esiri reviews some possible neurochemical and pathological correlates of behavioural changes in dementia with particular reference to alterations in monoaminergic neurotransmitter systems and their modulation by endogenous transmitters. 8 These data, offering some pathophysiological explanations for behavioural disorders in demented subjects are of great current interest but, unfortunately, this review is not complete and even presents some incorrect impressions that deserve the following comments:

Noradrenaline

Despite substantial neuronal loss in the noradrenergic locus coeruleus in Parkinson's and Alzheimer's diseases, 28 markers of noradrenaline metabolism in brain tissue are reported to be unchanged or increased. A non-significant increase in Alzheimer type senile dementia has been reported by Yates et al., whereas most other authors demonstrate a significantly decreased noradrenaline value ranging from 29% to 52% of controls in the striatum, hypothalamus, and several cortical areas. 1,3,4 In non-cortical projection areas there was no evident decrease in noradrenaline.

On the other hand, Zuberbueh et al. 4 defined a specific and pronounced loss of noradrenaline in the midline frontal area, superior temporal cortex, and hippocampus (90% to 95%) in demented patients with major depression along with a relative preservation of choline acetyltransferase activity in several subcortical regions. These data in patients with Alzheimer's disease suggest that dysfunction of the noradrenergic system is also related to mental changes and depression in parkinsonian patients.

Sero-Degeneration of serotoninergic systems in both Alzheimer's and Parkinson's disease results from neuronal losses in the dorsal raphe nuclei ranging in Alzheimer's disease from 40% to 76% and containing many neurofibrillary tangles that may involve up to 90% of the neurons; 2 cell depletion in Parkinson's disease averaging 20% to 40%. 3 This cortical and subcortical loss of 5-HT and 5-HIAA in some cortical and hippocampal regions of Alzheimer disease brain ranging from 54% to 77%, and a reduction of 5-HT, its