The dilemma of Cushing's sans tumour

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To the Editors:

How accurate are our statistics?

Among the SAARC countries (1) Sri Lanka has the lowest infant mortality rate (27) and maternal mortality rate (0.6), and the highest life expectancy (70.9).

The expectation of life and infant mortality rate by selected districts is given in Table 1.

Table 1. Population statistics by selected districts

District	*Expectation of life at birth*		*IMR*
	Males	*Females*	
Moneragala	74.7 (1)	75.5 (4)	8.3 (1)
Hambantota	73.2 (2)	76.8 (2)	9.3 (2)
Polonnaruwa	72.0 (3)	77.8 (1)	11.7 (3)
Sri Lanka	67.7	72.1	22.6

Note : Rank order in parenthesis.

District-wise data provided by the Registrar General's Department show that remote districts with lesser health care facilities have lowest infant mortality rates and highest expectation of life at birth and a higher physical quality of life index. It is essential that the basic mortality data are analysed to identify this contradiction.

Studies carried out in Jaffna (2) in 1982 showed that in an MOH area adjoining the Jaffna Municipality the IMR was 35.4/1000 live births, while the Registrar General's figures for that year was 18. There was 50% under-registration of infant deaths in hospitals and 96.6% under-registration of infant deaths at home. A subsequent study (3) in 1985 showed that only 9.1% infant deaths were registered in the Jaffna District. (The Registrar General's figure for that year was 18.4)

The IMR for the University Health Project area (which adjoins the Jaffna Municipality) was 42.9 for 1991 and 46.0 for 1992.

It is time that we carry out small scale studies in districts where the IMR is low in order to ascertain whether the rates are correct and if so, why? We may have a lot to learn.

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N Sivarajah, *Head, Department of Community Medicine, Faculty of Medicine, University of Jaffna, Sri Lanka.*

To the Editors:

The dilemma of Cushing's sans tumour

The diagnosis and management of classical Cushing's syndrome poses no problems. The traditional approach as outlined in most medical textbooks gives priority to the identification of an adrenal or a pituitary tumour. However Cushing's syndrome of adrenal origin may be caused by bilateral (primary) adrenal hyperplasia (1). The further management of patients with Cushing's without tumour is inadequately covered in textbooks of general medicine and surgery, but textbooks of endocrinology advise bilateral adrenalectomy as the treatment of choice (1).

The lack of a specialist unit causes therapeutic and diagnostic inadequacies in managing patients with endocrine disease in Sri Lanka (2). Hence physicians who identify a patient with Cushing's sans tumour often have difficulty in convincing colleagues of the need for bilateral adrenalectomy.

A 31 year old woman presented with classical physical signs of Cushing's syndrome. The diagnosis was confirmed by dynamic adrenocortical function tests. The lack of a 50% reduction in the cortisol level

with high dose dexamethasone suppression excluded a pituitary adenoma and suggested autonomous adrenal hyperplasia as the diagnosis.

Computerised tomography (CT) and ultrasound scan failed to show any pituitary or adrenal adenomata. Lentigenes which were seen in this lady are associated with bilateral adrenocortical hyperplasia of the idiopathic non-ACTH dependent variety. This condition is a well documented discrete entity (1,3,4).

This patient was then seen by surgical units in Sri Jayawardenepura and Colombo General Hospitals who conducted their own investigations over two years to "confirm the diagnosis and evaluate the patient". During these two years her hypertension became resistant to drugs and the glycaemic control was poor. She also had osteopenia.

In our view the best policy of management is to exclude a pituitary adenoma by an MRI scan followed by bilateral adrenalectomy. As these facilities were not available in Sri Lanka we referred this patient to a centre in India. The MRI scan with gadolinium contrast was normal and she underwent bilateral adrenalectomy. Histology confirmed bilateral micronodular dysplasia. Six months later she was completely well and was on adrenal replacement therapy only. Her serum cortisol was in the normal range.

However, a normal MRI scan cannot rule out the possibility of an occult pituitary microadenoma in 50% of patients (1). Hence constant surveillance to detect Nelson's syndrome is essential.

Three other patients with the same clinical presentation who cannot afford treatment in India are awaiting treatment for over one year. The lack of specialised facilities often forces surgeons to accept a diagnosis based on the physician's clinical acumen rather than on objective criteria. This may explain their reluctance to undertake radical surgery such as bilateral adrenalectomy.

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S H Siribaddana *Registrar in Medicine and* **D J S Fernando** *Resident Physician, Sri Jayawardenepura General Hospital, Thalapathpitiya, Nugegoda, Sri Lanka.*

To the Editors:

Symptomatic hypoglycaemia in elderly diabetic patients

Sulphonylurea induced hypoglycaemia (SIH) is an iatrogenic complication associated with significant morbidity and mortality. The incidence of SIH is reported to be 19 per 1000 patients per year (1), and the elderly diabetic appears to be particularly vulnerable (2). Morbidity and mortality in this age group may be increased by the inability of patients and relatives to recognise warning symptoms. I studied 144 consecutive patients (61 men, mean age 67.1, SD 7.7 years, mean duration of diabetes 9.1, SD 7.5 years) aged over 61 attending an outpatient diabetic clinic in a teaching hospital over a four week period.

All patients (and accompanying persons if any) were asked whether the patient had experienced any key symptoms of hypoglycaemia (3) within the previous 3 months, and if so, whether symptoms were severe enough to require assistance of another person or seek treatment from a doctor. Symptoms were attributed to hypoglycaemia if they responded to oral or intravenous glucose therapy alone. Patients were also asked whether they had received any adv m identification, prevention or treatment of "low blood sugar". All patients were asked what they would do if they suspected that they had low blood sugar.

At least one episode of symptoms suggestive of SIH requiring the assistance of another person was experienced by 82 patients within the previous 3 months. Of these 22 sought medical advice and 7 required hospital admission. 44 (53.6%) of the patients experiencing SIH were being treated with chlorpropamide, 26 (18%) with glibenclamide and 12 (8.3%) with tolbutamide. Eight patients receiving glibenclamide who experienced SIH were prescribed a dose of 10 mg bd, which is in excess of the maximum daily dose of 15 mg. The prevalence of SIH among those taking different sulphonylurea was chlorpropamide 68.7%, glibenclamide 72.2% and tolbutamide 27%.