

Letter from . . . Chicago

Temples, tubes, and plastic bags

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A small grey monkey hanging from a tree outside a Xerox shop symbolises the contrast between the old and new on tropical Bali. "I like very much everything Western," said our tourist guide in Denpasar, the capital, and so apparently do most of the other 2.5 million Balinese as they roar on their poorly silenced motorcycles across the island. But Bali is also the island of temples, and there is one at every corner, usually guarded by fierce stone monsters with awful fangs, some representing the evil Rangda, others the good spirit Barong. As in other mythologies, these two have been locked in a fierce struggle since time immemorial; and the local Barong plays clearly show that the battle is not always fairly fought, for followers of each camp resort to mean tricks such as changing themselves into boars or birds, or entering their opponents' bodies in the form of witches.

Bali has always been a tourist paradise, with beautiful beaches, volcanoes that rise from the blue ocean, gorgeous mountain lakes, green rice fields, and purple tropical trees. Some ten years ago the Australians discovered Kuta beach and made another Surfers Paradise out of it, so that around the lovely beach with its beautiful sunsets has arisen a muddy tourist shanty town of souvenir shops, pubs, and inexpensive *losmen* huts to live in. Bali is closer to Perth than Perth is to Sydney, and the teenagers, arriving on Qantas with little else than a surfboard, ride the waves till sunset, the girls slender and suntanned, the boys skinny and athletic. Meanwhile at Sanur, where the beaches look eastward on to the volcanoes, the crowd is more cosmopolitan, and the poor Balinese, already struggling with English, must now also learn to communicate in French, Japanese, and Italian.

Yet they manage quite well, even in the inland mountains, where little clinging urchins aggressively pursue the tourist with wooden figurines, T-shirts, dyed cotton fabric, jangling bells, carved boxes, and coconuts for half-a-dollar. Indeed, the roads in Bali are lined with children; the birth rate is still high, a couple having on an average ten children. Some 90% of the people are Hindu; there are four castes, the Brahmins being the highest; and agriculture is the main occupation, along now with tourism. There are three crops of rice each year on the island, and there is no industry, so that everything has to be imported.

The official year in Bali lasts only a little over six months; and 10 March marked the beginning of 1911, celebrated with tokens of incense and flowers decorating the temples, the houses, the stones monsters, and the women. The latter are often seen carrying loads on their heads, but they never go topless. For this one must travel to Sydney: "Where is fifty percent beach?" recently asked a camera-bearing Japanese tourist—"you know, body off beach," he explained as I looked rather puzzled. And as he walked off towards the north end of Bondi Beach, once a strong-

hold of puritanism, I reflected on how clothes, with all due respects to Professor Teufelsdröckh of Weissnichtwo, had become a relatively indifferent marker of whatever is meant by civilisation.

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Yet in the eternal conflict between the good Barong and the bad Rangda, with all the evil microbes with their ever-changing sensitivities and names undoubtedly lined up behind the latter, one would expect the modern intensive care unit to be always on the side of Barong, and to impress no end our tourist guide from Denpasar. Yet in the Western world there has been no little criticism of these intensive halls of healing, some dissatisfied, usually self-appointed referees viewing them as dehumanising, not cost-effective, concerned mainly with maintaining unsalvageable patients, and prone to unleashing an orgy of unnecessarily precise and clinically irrelevant invasive haemodynamic measurements. These critics of the "health care delivery system" would derive considerable ammunition from the case of the 52-year-old man who presented with a blood pressure of 200/140 mm Hg and who clearly would be expected to have at least some degree of hypertensive heart disease. Nobody but a masochistic young cardiologist, wishing to set himself up as target for the slings and arrows of the critics of the medical profession, would have thought that this was an obscure cardiomyopathy requiring cardiac catheterisation, not even in a teaching hospital where venal economic motives would not apply. But the patient developed extrasystoles during the catheterisation, was put on a lignocaine drip, from which he developed convulsions, then became apraxic and asphasic, and at last hypotensive. He was now maintained with a noradrenaline drip, his bowels became gangrenous, and during the surgical repair of his mesenteric artery the blood pressure fell again and then his heart stopped. After resuscitation his kidneys shut down, requiring dialysis; his lungs failed, leading to a tracheostomy and a respirator, from which he could not be weaned; then a patch of gangrene from the noradrenaline appeared on his forearm; and nobody could find another vein for dialysis. As *Pseudomonas septicæmia* set in, an inexperienced medical student had the temerity to suggest that it might have been better to assume in the first place that the cardiac condition was secondary to long-standing hypertension.

Of course, this outrageous suggestion reflected merely the naiveté of youth. Those who do not know history will forever remain children—and our all too critical student had no concept of the bad old days when intensive care units would have been inconceivable. At our own hospital¹ the death rate from thyroidectomy for exophthalmic goitre in 1931-3 was 13.1%, being attributed to inadequate preoperative and postoperative care, relegating the operation to inexperienced surgeons, and to allowing the intern rather than the consultant to decide when to operate. Malnourished patients lost even more weight from the scanty ward diet; they were prepared inadequately with iodine;

and many developed severe local inflammation or even fatal complications from the parenteral administration of fluids prepared by home cooking. But nobody could accuse the physicians of those times of overinvestigation or of undue reliance on technology; for "the infrequency of checking the condition of the patient with metabolism tests may be gauged from the fact that there was one unsatisfactory basal metabolism machine for the whole hospital of 3200 beds, and that only a few tests were done each day by a technician who also had the responsibility of the electrocardiographic laboratory."

In our more advanced but cynical age, when so much has been written about the waste of treating unsalvageable patients, astute clinicians have observed that patients having more than five tubes rarely recovered. It is to dispel this undue pessimism that I must write about a patient recently brought to my attention by the intensive care nurses, who now also keep track of the total tube score. The patient, stabbed 19 times while innocently walking through an alley, had bilateral pneumothoraces and lacerations of his kidneys, liver, and pancreas. He was taken back to the operating theatre four times. He made a complete recovery and came back to bring flowers and boxes of candy to his guardian angels. These same ladies informed me that in fact this man had had 16 tubes during his period in hospital—namely, an endotracheal tube, a nasogastric tube, three chest tubes, two sump tubes, two-subclavian lines, one Swan-Ganz catheter, one arterial line, one Foley catheter, one tracheostomy tube, one Penrose drain, and two peripheral lines.

Further insights into intensive care units came recently from Dr Aloysius Cuyjet, a 34-year-old Newark cardiologist, who, impressed by the high turnover of nurses in his hospital, decided to get some first-hand experience by working as a nurse himself for a few days. Never before had he felt so tired as after his first day of nursing—lifting heavy patients, spending an hour changing a patient's linen only to find out that she had meanwhile become soiled so that he had to do it again, taking four daily trips to the x-ray and nuclear medicine departments, and giving bed baths. His conclusions were that nurses were overworked and underappreciated, that their chances of advancement were poor unless they moved on to administration, and that essentially this was a job for people under the age of 40. He further suggested that medical students would greatly benefit from spending a few weeks acting as nurses during their training, especially since he noted that doctors were often irritable or felt threatened when nurses made suggestions about treatment. Yet it is after all the nurses who are essential to the patients' recovery, spending as they do their nights and days at the bedside, while the doctors

slip in and out between emergencies, committees, trips to Bali, and dinner parties.

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It was at such a dinner party, recently, while I was enjoying a salmon steak, that the conversation turned to the differential diagnosis of coma. It was mentioned that for generations medical students had been taught to approach this problem according to the mnemonic AEIOUY. In this alphabetical vowel-orientated system, A stands for alcoholism, a frequent problem in city hospitals, where drunks are often brought in comatose from alcoholic hypoglycaemia or beta-hydroxy-butyric acid ketoacidosis; E stands for epilepsy, what the British call fits and our residents "seizing"; O stands for occlusion (coronary) and the more modern electrical causes of cardiac dysfunction; U is for uraemia; and Y stands for diabetes—nobody knows why, as the mnemonic would have it, but possibly because of *yperglycaemia* and *ypoglycaemia*.

Occasionally, however, as was mentioned at this dinner party, as the spirits grew high, the patient in coma will defy all diagnostic attempts. Then the jovial physician sitting on my right reminisced how, many more years ago than he would like to acknowledge, a very obese woman in a New York municipal hospital had remained unconscious for five days and nobody knew why. Being the intern on the service, this doctor remembered his professor's recent teachings, that perhaps most mistakes in medicine are made when doctors omit to perform the pelvic examination. So on the sixth day of this woman's stay in hospital he followed his teacher's admonition—and then he proceeded to describe how he began to remove several malodorous rags—this despite my pleas that I would prefer to eat my salmon steak first. Continuing his exploration, the story went on, he discovered and removed a small plastic bag, and then another, and then several more. The quiet gentleman sitting on my left promptly nodded his head knowingly. He also had served a stint in a city hospital casualty department, and thus was quite familiar with some of the more ingenious ways of smuggling cocaine.

Reference

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What is the aetiology of systemic sclerosis, and how should it be treated?

Systemic sclerosis is a generalised disorder of connective tissue that occurs in genetically predisposed individuals. The presence of antinuclear antibodies and circulating immune complexes, together with abnormalities of cellular immunity, indicate the importance of immunological factors in its pathogenesis. Functional vascular disturbances clinically manifesting as Raynaud's phenomenon are followed by widespread vascular disease affecting medium and small-size blood vessels in the lungs, kidney, gastrointestinal tract, and heart. The prognosis varies from patient to patient. Women, although more often affected, do better than men. The condition in many patients, especially in those with the combination of calcinosis, Raynaud's phenomenon, oesophageal lesions, sclerodactyly, and telangiectasia, may remain static for years. Patients with HLA-B8 tend to have a more severe type of disease.¹

There is no specific treatment. Warm clothing, particularly gloves, a warm environment, and avoidance of trauma to the hands, are important. Vasodilators rarely help the circulation, and sympathectomy has only a short-lived effect. Intravenous low molecular weight dextran has not been proved helpful in controlled trials, but intravenous prostaglandin E₁² or prostacyclin is promising for patients with severe vascular disturbance. Plasma exchange has also been shown to improve the digital circulation. Penicillamine, which interferes

with the intermolecular cross-linkage of collagen, may cause limited improvement of the dermal sclerosis in early cases but has no effect on the vascular or visceral manifestations. The drug has to be given for several years and has adverse side effects. Neither colchicine, which inhibits the accumulation of collagen by blocking the conversion of collagen to procollagen, nor cyclofenil, a drug related to stilboestrol without its oestrogenicity, are associated with consistent improvement. Oral corticosteroids and immunosuppressives have occasionally helped myositic and arthritic features but do not alter the progress of the disease. Symptomatic treatment is required for affected internal organs, and tetracycline may help patients with malabsorption due to bacterial overgrowth in the gastrointestinal tract. A striking new development is the early aggressive treatment of previously fatal malignant hypertension and progressive renal failure with oral captopril.³ The blood pressure returns to normal, and softening of the skin has also been noted.—N R ROWELL, consultant dermatologist, Leeds.

¹ Hughes P, Gelsthorpe K, Doughty RW, Rowell NR, Rosenthal FD, Sneddon IB. The association of HLA-B8 with visceral disease in systemic sclerosis. *Clin-Exp Immunol* 1978; 31:351-6.

² Martin MFR, Dowd PM, Ring EFJ, Cooke ED, Dieppe PA, Kirby JDT. Prostaglandin E₁ infusions for vascular insufficiency in progressive systemic sclerosis. *Ann Rheum Dis* 1981; 40:350-4.

³ Lopez-Ovejero JA, Saal SD, D'Angelo WA, Cheigh JS, Stenzel KH, Laragh JH. Reversal of vascular and renal crises of scleroderma by oral angiotensin-converting-enzyme blockade. *N Engl J Med* 1979; 300:1417-9.