

## EDITORIAL:

# DECLINING POST-MORTEM: A CAUSE FOR CONCERN

*"Mortui vivis praecipiant".*  
(Let the dead teach the living).

Carl Rokitansky, circa 1860

In recent years, the assessment of health care and the evaluation of performance and expertise within the medical profession have assumed considerable importance. The autopsy serves as a valuable "quality control" measure whereby the reliability of details regarding the clinical history, investigative procedures and clinical diagnoses may be assessed.

There is no doubt that the autopsy is useful. Almost invariably additional diagnoses come to light during a post-mortem (PM) examination. In a significant proportion of cases (25%), the PM alters the diagnoses completely.<sup>1</sup> In a prospective survey of 1000 necropsies, Cameron *et. al.*, found that the main clinical diagnosis was not confirmed in 39% of cases.<sup>2</sup> The autopsy also serves as a check on the appropriateness of therapy and is a valuable lesson against similar mistakes being made in future. It provides data on both old and new diseases; this may follow from single case reports or of compiled data from several cases. Not only may the natural history of a disease be studied to advantage but the effects of investigative/diagnostic procedures, drug therapy and surgical intervention may also be observed.

Several diseases have been recognised through autopsy and the following is but a partial list: post-partum hypopituitarism (Sheehan's syndrome), hypertrophic obstructive cardiomyopathy (HOCM), Whipple's disease, pulmonary alveolar proteinosis and diethylene-induced renal damage. The pathology of several diseases and their associations have been clarified; these include the

pathology of radiation injury, the occurrence of cancers after radiotherapy and immunosuppression (squamous cell carcinoma of skin, carcinoma of thyroid and leukemia in children), the association of blindness and retrolental fibroplasia, and of cirrhosis and  $\alpha$ -1-antitrypsin deficiency. Necropsy has clarified the syndrome of Jamaican bush tea disease (veno-occlusive disease of the liver), the syndrome of metastasising carcinoid, myeloid metaplasia and more recently, the Acquired Immunodeficiency Syndrome. The pathology of many industrial diseases has been elucidated as a result of careful autopsy studies, *viz*: asbestosis, berylliosis, silicosis and silofillers lung are a few. It seems unlikely that the pathogenesis of Legionnaire's disease and the Toxic Shock Syndrome would have been discovered without autopsies.

There are other useful considerations as well. With all the inherent problems of obtaining live human tissue for transplantation procedures, the autopsy is a potentially valuable source of organs and tissue. The kidney, bone marrow, vascular conduits, cornea, cartilage, fascia and skin are used increasingly in transplantation, grafting and reconstructive surgical procedures. Cadaver-derived hormonal extracts have potential uses in replacement therapy. Autopsy material may also be used for tissue culture. Autopsy provides a valuable insight into various aspects of the health problems in the community, and picks up many lesions that would otherwise be missed. Tuberculosis is generally the diagnosis most often missed ante-mortem and the number of undiagnosed aortic aneurysms, cardiac valvular

poorly. All information obtained by this examination should be conveyed not only to the clinicians and surgeons concerned, but where relevant, to the families of the deceased as well. The fear of embarrassment by unexpected findings may discourage some doctors from seeking autopsies. Post-mortem examinations performed inadequately and without due care are practically useless. Complicated cases need the attention of experienced pathologists, not medical officers with insufficient training. Some pathologists actually consider autopsies a chore and clinicians may be discouraged from seeking autopsies from these pathologists who are not too enthusiastic to perform a post-mortem because of their multifarious responsibilities. Autopsies are often considered low-priority and unpleasant; increasingly so, pathologists are turning off from performing them and devoting more time to surgical pathology or other service commitments and research.

Socio-cultural factors also play an important role: the moribund are sometimes taken home to die "peacefully" or "with dignity". Permission for post-mortem examination is not granted for other reasons: because the patient has "suffered enough" or because of a reverence for the dead and a reluctance to "tamper with the remains". Relatives may refuse to grant consent fearing disfigurement, delay in release of the body and putrefaction. Unscrupulous undertakers, anxious to maintain a rapid turnover or in the mistaken belief that necropsy interferes with the embalming process are known, on occasion, to influence the next-of-kin to refrain from consenting to an examination. A routine post-mortem service, if it is available at all, is often not available around the clock. As it is not a life-saving procedure, post-mortems are often performed at the convenience of the pathologist. Additionally, some hospitals are ill-equipped with no facilities for storage or transport of the deceased.

### WHAT CAN BE DONE

A serious attempt to revive and improve the hospital post-mortem rate in this country is necessary, and it must also be ensured that such post-mortems are done well by qualified patholo-

gists, and not by untrained medical officers. Pathology continues to be an unpopular discipline and is regarded as a glamourless profession in Malaysia. Pathologists, indeed, are a rare species amongst the medical profession — and an aggressive attempt to overcome this nationwide shortage is necessary. The projected requirement of manpower in pathology (including microbiology and clinical chemistry) for 1985 is 608,<sup>7</sup> against the present number of 85 nationwide. Although a local Masters programme in Pathology (M. Path.) is being offered in the University of Malaya, additional incentives are needed to attract doctors intending to pursue the discipline.

There is a need for mortuary facilities to be improved and updated with suitably-trained ancillary staff to work in the mortuary. An active campaign is perhaps necessary to educate not only the general public but the medical profession on the importance of the autopsy examination as a check on professional standards and of its value in the understanding of disease processes. Socio-cultural resistance to autopsy must be slowly broken down, and a possible way is through educational programmes and campaigns with a view to increasing public awareness on the usefulness of the post-mortem examination. It may be feasible to enlist the support of religious organisations in this programme. Certainly much can be done to improve the method by which permission for autopsy is obtained. A committed clinician often succeeds in obtaining consent by merely devoting time and energy talking to the relatives and explaining the need for such an examination. The autopsy service after all is and will probably be, the only form of free service available in all of medicine. Eventually, the rapid decline in hospital necropsy rate can only be reversed if both clinician and pathologist have the will to do it. Let us not bury our mistakes with the dead, but make concerted efforts to resuscitate and sustain this important branch of medicine.

### REFERENCES

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<sup>2</sup> Cameron HM, McGoogan E, Clarke J, *et al.* Trends in hospital necropsy rates: Scotland 1961-74. *BMJ* 1977; 1:1577 – 1580.

<sup>3</sup> Pathmanathan R. *Patterns of disease in developing countries*. Paper presented at Seminar, Max von Pettenkofer Institut, Munchen, December 1983.

<sup>4</sup> Annual Reports of the Medical and Health Departments, Ministry of Health, States of Malaysia. Kuala Lumpur, 1957–1980.

<sup>5</sup> Walsh CJ. Autopsy rates in U.S. hospitals. *PAS Rep* 1974; 12 (6) : 1–4.

<sup>6</sup> Cameron HM, McGoogan E, Watson H. Necropsy : a yardstick for clinical diagnoses. *BMJ* 1980; 281: 985–988.

<sup>7</sup> Manpower Projections. Ministry of Health, Malaysia, 1983.

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