

“Her body dissected...

..by fiendish men, her bones anatomised, her soul, we trust, has risen to God, where few physicians rise” was the 1846 epitaph for a nine-year-old girl from New York State whose body was stolen by a grave robber for medical dissection. In Europe for several centuries the corpses of criminals were given over for dissection after death, but the supply could not satisfy the demand from medical schools. This led to grave robbing and, in Britain, murder, the Burke and Hare scandal of 1828, and a reform of the law. In the UK more recent scandal occurred when a pathologist in a children’s hospital was found to have removed the internal organs of children at autopsies and stored them, without telling their families. As a result many families throughout the country asked what had happened to their children’s bodies at autopsy and some, where stored organs or tissue, including microscope slides, could be traced, asked for their return for formal burial. All this has again caused distrust and a change in the law.

In both scandals the central issue was the medical use of people’s bodies for research and training. The major concern is that of consent. Just as the British law of 1832 formalized consent in an explicit fashion for the use of people’s bodies in science, the current change is to reassure the public that what they expect to happen will, and nothing else. Being absolutely specific – in other words, honest – is the best way to regain trust. Some families find it helpful to feel that there can be more understanding of what happened, whereas others feel that it is a desecration of their child’s or relative’s body. This obviously has to be respected.

In her annotation, Dr Squier warns us of the effects of the recent scandal on neuropathology in the UK and elsewhere.¹ The issue is more widespread. Similar concerns have been expressed for neonatal pathology.² In the UK at least, pathology is a speciality in crisis, with a continuing decline in recruitment.³ Equally important, there has been a marked decline in the number of autopsies of adults and children. This appears to have started before the recent events and to be occurring in all countries.

With this background it is pertinent to ask whether, beyond legal investigation, post-mortems are still needed. They used to be the final diagnostic arbiter: Hughlings Jackson commented sarcastically that the pathology of those who do not make post-mortem examinations is often confident and definite. Many conditions were first described by nineteenth century pathologists. Freud’s major study of cerebral palsy was the first of a distinguished series that correlated clinical and pathological findings.⁴ However, just as the microscope revolutionized medicine then, advances in medical imaging and in genetics have transformed our diagnostic accuracy, leading, for example, to most of the recent advances in understanding the cerebral palsies. Performing post-mortems cannot be a particularly pleasant task,² so why do pathologists feel so concerned about it? After all, there is still plenty of need for neuropathological expertise in interpreting biopsies from

muscle, nerve, and the central nervous system.

Dr Squier explains why. For anything other than oncology, brain biopsy is rightly rare. Post-mortem studies reveal changes not seen by other techniques. Advances in immunostaining and other techniques have allowed far more precise classification of tissue components and their disorders. Variant CJD (Creutzfeldt-Jakob disease) and the current controversy over the pathogenesis of shaken baby syndrome are recent examples where neuropathological research has stimulated new thought and insights, and illustrate why, as a professional group, we must support our colleagues.

There is a certain queasiness in the idea of a person’s body being dissected, so doctors who cared for a child can find it hard to ask for an autopsy.⁵ Education about the value of autopsies, training in how to ask, closer contact between pathologists and clinicians, and involving trained counsellors are all positive steps. Medical charities could help by providing independent explanations and, perhaps, by encouraging the carrying of cards permitting post-mortem studies, similar to organ donor cards. Ways to make the autopsy less of an apparent violation are now being considered. Limited post-mortems are already allowed for, as mentioned by Dr Squier. As a medical student I was always struck by the ugly way that cadavers were sewn up after post-mortem. If this could be done in a more cosmetically acceptable fashion, it might go some way towards helping families accept the suggestion.

Unfortunately this still leaves the problem of organ retention. Brains are the most commonly retained organ.³ Is it necessary to retain the entire brain? Due to a call for research proposals into less invasive autopsies, the role of post-mortem magnetic resonance imaging is being explored in the UK. This might be combined with stereotactically guided biopsies. A keyhole autopsy, with neuropathologists adopting neurosurgical techniques and using limited or even internal approaches in their sampling, is not an impossible development. As this is not just a problem in the UK, such ideas are worth discussing internationally. Hopefully, suggestions like this will allow neuropathology to misquote Mark Twain and say that reports of its death were fortunately exaggerated.

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