Autopsies: an exercise in futility?

RE Horowitz

Pathologist, West Los Angeles Veterans Affairs Medical Center, and Clinical Professor of Pathology, University of Southern California School of Medicine, Los Angeles, USA

KEYWORDS Autopsy, performance measurement

DECLARATION OF INTERESTS No conflict of interests declared.

Published online September 2009

Correspondence to RE Horowitz, Department of Pathology, VA Medical Center, 11301 Wilshire Boulevard, Los Angeles, CA 90073, USA

e-mail R.E.Horowitz@ucla.edu

Is the autopsy an antiquated procedure? Is it an exercise in futility? Does anyone care?

The decedent certainly does not.

The decedent's family does not know the potential benefits of the autopsy, such as discovery of unsuspected genetic or infectious disease or work-related disease, or obtaining information needed for claims and benefits or so that they could be assured that nothing that they did, or did not do, would have changed the course of events. Because they do not know, they do not care.

Practising physicians not only do not care, they avoid autopsies because of the possibility of detecting diagnostic discrepancies or therapeutic errors.

Pathologists do not care – autopsies are time-consuming, unpleasant and, in the United States, not reimbursable.

Hospitals do not care because autopsies are expensive and, again taking a US perspective, no insurer pays for them.

Health systems do not care because there is little data to prove that autopsies improve healthcare or make it cheaper.

Medical schools do not teach autopsies because pathologists who are skilled and interested in autopsies are rare but, even when available, are not encouraged because they generally do not generate any revenue or receive large grants.

The greater community does care because it knows the value of communicable disease surveillance, of environmental hazard detection and the importance of accurate death certification, but it does not have the money to pay for autopsies.

I care because autopsies are the best way to learn about the natural history of disease and to assess diagnostic

accuracy and therapeutic efficacy; in other words, autopsies are the best way to measure overall health system performance and the very best way to teach pathology to medical students, pathology residents and other physicians in training.

The fact that autopsies continue to detect clinically important diagnostic discrepancies is generally ignored. An analysis of more than 50 studies found that, in US hospitals in 2000, the correct cause of death escaped clinical detection in 8–23% of cases, with as many as 4–8% of all deaths having a diagnostic discrepancy that may have harmed the patient. In addition to clinically missed diagnoses, up to 5% of autopsies disclosed clinically unsuspected complications of care.¹

So what can be done? Simply admit the futility and give it up? Many hospitals already have and feel unable to do anything about it. There is an alternative and that is to upgrade the autopsy; to bring it into the twenty-first century – no longer tolerate it as a museum of archaic techniques – and make it valuable again.

How can this be done?

First, increase the autopsy rate by developing a sophisticated decedent affairs system in all hospitals. Autopsy authorisation should be obtained in the decedent affairs office by trained personnel. The doctor who is called to the bedside to 'pronounce' a patient is usually hesitant to ask for an autopsy and should not do it. That doctor may or may not know the patient. The family at the bedside is usually too distraught to listen to what the doctor is saying and certainly is in no mood to make a rational decision. In a decedent affairs office, away from the bedside of the decedent and usually some time after the death, there are other things to be discussed, such as funeral arrangements and insurance and financial matters, and the autopsy is brought up as another matter to be decided, with the rationale explained calmly and dispassionately. When there is an

effective decedent affairs office, not only does the autopsy rate increase, but public relations improve, organ donations increase and there is better risk management.²

Next, centralise autopsies in a regional facility under the auspices of a medical school or medical examiner's (procurator fiscal's/coroner's) office, thus freeing the community hospital and the hospital pathologist of the chore. This would provide sufficient numbers of autopsies to attract dedicated pathologists and justify their salaries, and would also provide adequate material for teaching in an environment that values research.

Finally, use modern techniques of imaging, molecular pathology and computer science to bring the autopsy to the same level of sophistication enjoyed by surgical pathology and clinical medicine. The crucial question, of course, is how to pay for this. I know that the properly performed autopsy is the best performance and outcome measure of overall medical care.³ I am convinced that if sufficient numbers of autopsies are performed by dedicated pathologists, using modern methods, data can be obtained that will demonstrate which clinical trials show promise, which drugs or procedures are most effective, which 'evidence-based' clinical practice guidelines are most successful, which physician groups are most productive and which healthcare systems are most economical.

The beneficiaries of such findings would be the major payers of healthcare, for example the government (and the insurers in some healthcare systems), and because they would profit from the information, they should pay.

REFERENCES

- I Shojania KG, Burton EC, McDonald KM et al. Autopsy as an outcome and performance measure. Summary, evidence report/ technology assessment: number 58. Rockville, MD: Agency for Healthcare Research and Quality; 2002. Available from: http:// www.ahrq.gov/clinic/epcsums/autopsum.htm
- 2 Haque AK, Cowan WT, Smith JH. The decedent affairs office. A unique centralized service. *JAMA* 1991; 266:1397–9.
- 3 Horowitz RE, Naritoku WY. The autopsy as a performance measure and teaching tool. *Hum Pathol* 2007; 38:688–95.

DATES FOR YOUR DIARY: FORTHCOMING SYMPOSIA

 Adolescent health: everyone's problem (RCPE/RCPCH joint symposium) 24 September 	
 Diabetes and endocrinology: 	2 i September
clinical challenges & expert advice	I October
Renal medicine	7 October
Collegiate Members' Symposium: updates in internal medicine	23 October
 Hot Topic Symposium: thrombosis and antithrombotic therapy 	28 October
Gastroenterology	6 November
RCPE Preston Symposium: 15th anniversary	
(Royal Preston Hospital)	11 November
Cardiology	20 November
Neurology	27 November
49th St Andrew's Day Festival Symposium:	
updates in acute medicine	3–4 December
RCPE Northern Ireland Symposium: updates in medicine	
(Hilton Hotel, Templepatrick)	28 January
Hot Topic Symposium:	
healthcare-associated infection	2 February

All symposia are held at the Royal College of Physicians of Edinburgh unless otherwise stated.

Programme details will become available on the website: www.rcpe.ac.uk/education/events/ index.php_or you can contact the Education Assistant (tel: 0131 225 7324, email: h.elliott@rcpe.ac.uk) to be added to the mailing list for an event.

Unable to attend a particular symposium?

Selected lectures (more than 100 currently available) can be listened to online, via the Fellows' and Members' Secure Area of the College website. Log on at http://www.rcpe.ac.uk/education/lectures/index.php.

