Improving the Autopsy Rate in a Teaching Hospital

To the Editor.—Autopsy studies have contributed to the development of modern medicine through their role in elaborating precise diagnoses and research protocols as well as in allowing better comparisons between academic and clinical performance. Since the 1960s, a steady decrease in autopsy rates has been reported in academic institutions, resulting presently in the low rate of 11%. Among the suggested explanations for this decline, which occurs in most teaching hospitals, is that autopsies significantly contribute to the vast number of laboratory and imaging studies available, leading to diagnoses of apparent certainty, which gives the impression that autopsy studies are unnecessary. Autopsies, considered in the past the gold standard for diagnosis, have been replaced by serology, imaging, biopsies, and other studies. In addition, autopsy studies are expensive, and the costs are evidently covered by the institution. The absence of the curricular value of autopsy studies in training programs for medical specialties also plays an important role in the steady decline of this essential element in the academic medical audit. A survey performed in 26 teaching hospitals in Mexico reported a mean autopsy rate of 7%. Overall, autopsy rates in the United States are lower than 15%, and in some hospitals, the percentage has decreased from 41% to 5%.

The National Institute of Neurology and Neurosurgery of Mexico belongs to the system of the National Institutes of Health, whose main functions are medical assistance, research, and medical training. Patients from all over the country are referred to this institution, where an average of 80 highly qualified specialists undergo tutorial training every year. All specialty programs are under the supervision of the medical school from the National University of Mexico. The main programs are neurosurgery, neurology, and psychiatry, accompanied by other specialty studies related to neurologic sciences, such as neuroradiology, neuroanesthesiology, neurootology, neuroophthalmology, neurologic vascular therapy, neuropsychiatry, neuropsychology, neurologic rehabilitation, and neurologic intensive therapy. Master’s and doctoral programs are offered in neuroscience disciplines such as neurogenetics, neurochemistry, neuroimmunology, neuropharmacology, and experimental pathology. To enrich the training process by increasing the rate of autopsies performed at the National Institute of Neurology and Neurosurgery of Mexico, the Institutional Autopsy Program was established by means of a committee that included academic authorities, neuropathologists, and residents. The teaching director is the head of the program and appoints the members of the committee and subsequently evaluates the residents’ performance in the program as part of their obligatory academic curriculum. The evaluated areas are the autopsy procedure itself and the correlation between the clinical and pathologic results as well as the individual research work assigned to each resident. Each resident of the main specialties of neurology, neurosurgery, and psychiatry must successfully complete these requirements as part of the academic program during the first 3 years of training. The resident must participate in at least 5 autopsies per year. This participation includes requesting authorization from the patients’ relatives, elaborating on clinical and radiologic resumes, and actively participating in evisceration and anatomic dissection. Junior residents perform the autopsy and are trained by senior residents, who are responsible for the procedure. Pathologists and residents perform the anatomic dissection and histopathologic study and discuss the results in weekly rounds. During the 5 years prior to the implementation of this program in the curricular obligations, the mean annual autopsy rate at our institution was 15%, ranging from 8% to 23%. In 1998, the year the program began, the autopsy rate increased to 37.5% (Figure). Since then,
the rate has ranged from 37.5% to 46% (mean, 43%). These results show that the inclusion of autopsies as an integral part of graduate programs, together with the participation of an academic committee to promote, assess, and evaluate the results, increases the autopsy rate to optimal levels and improves the relationship between the clinical and pathologic program, which we consider fundamental to the process of medical training. The validity of autopsies persists, since the procedure allows the establishment of a link between clinicians, pathologists, and researchers in order to (1) correlate clinical, diagnostic, and therapeutic interventions; (2) disclose failures; (3) improve accuracy; and (4) observe, in integral form, the whole process of disease. Autopsies also allow the description of new diseases, provide countless elements for research, and, most of all, greatly improve the quality of medical training.

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