

Chapter 1

Introduction

Scope of the Chapter

- Purposes of the autopsy
- Autopsy techniques

Autopsy pathology is the practice of medicine that directs its efforts to the scientific study of the human body after death. The objectives of the autopsy include: the evaluation of clinical diagnoses; the detection and diagnosis of unsuspected diseases; the study of the cause, nature, and development of disease; determination of the cause of death; assisting in the assessment of the validity, value, and appropriateness of diagnostic and therapeutic procedures; provision of information to families, physicians, and society; quality assurance in medicine; and medical education and training. The autopsy is a professional activity that requires the application of extensive knowledge and technical ability to the art and science of its performance and interpretation.

The autopsy makes major contributions to the elucidation of disease pathogenesis by providing the observations for construction of pathogenetic hypotheses. While the initial idea usually originates from a single autopsy, the examination of the hypothesis depends on the study of a number of examples, which, it is hoped, will demonstrate the steps in the sequence of development of a lesion or process. Well-performed autopsies can make substantial contributions to the advancement of medicine.

The postmortem examination must be systematic; it must be as complete as custom or law will allow or as the goals of the autopsy dictate, and a proper technique of examination is mandatory. Technique in the performance of an autopsy,

as in many other endeavors, is not synonymous with a rigid system. Technique comes to be an individual matter, compounded of experience, judgment, and manual skill. Individual techniques may differ in detail even though their underlying principles and purposes are identical. The procedures must be sufficiently flexible to adapt to the demands of the individual case, and the prosector should prepare for the unusual case by acquiring dexterity in alternate techniques.

Autopsy Techniques

A number of general and specific autopsy techniques have been described, and a bibliography citing many of these has been assembled.¹ The four major autopsy techniques differ chiefly in the methods used in removal of the organs and the order in which they are opened. The history of the development of these techniques has been discussed.^{2,3} Individual differences in the approach to the autopsy are generally only minor variations of one of the following procedures. Knowledge of these different techniques is useful, allowing one to keep an open mind to the various ways of performing an autopsy.

Virchow Technique

In the Virchow technique, the organs are removed one by one and dissected as removed. This approach is good for demonstrating pathological change in individual organs, especially in high-risk autopsies or where permission is limited to one organ. This organ can be immediately removed and examined. The disadvantage of this technique is that relationships between various organs may be hard to interpret.

Rokitansky Technique

This procedure is characterized by in situ dissection, in part combined with en bloc removal. The term “Rokitansky technique” is used erroneously by many pathologists to designate the en masse technique.

En Masse Technique

Thoracic, cervical, abdominal, and pelvic organs are removed en masse and subsequently dissected into organ blocks. This is the best technique for preserving the vascular supply and relationships between organs. Another advantage is that the body can be made available to the undertaker quickly, without having to rush the dissection and risk obscuring findings or destroying important specimens. The major disadvantage is that the organ mass is often awkward to handle, and the autopsy is difficult to perform without an assistant. The en masse technique is the method that will be described in this manual.

En Bloc Technique

Various modifications of the en bloc technique are widely used. Thoracic and cervical organs, abdominal organs, and the urogenital system are removed in functionally related blocks. This procedure is a compromise between the Virchow and en masse techniques, preserving anatomical relationships sufficiently for most cases while being simpler for one person to execute.

References

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3. Ludwig J. *Handbook of Autopsy Practice*. 3rd ed. Totowa, NJ: Humana Press; 2002.