
Guidelines for Cooperation Between Pathologists and Funeral Professionals In Matters Pertaining to Autopsies



At the request of the National Funeral Directors Association (NFDA), the College of American Pathologists (CAP) has undertaken a revision of this document. Input has been obtained from funeral directors as well as pathologists serving on the CAP Autopsy and Forensic Pathology Committees.

The Autopsy and Forensic Pathology Committees of the CAP recommend a continuing dialogue between the CAP and the NFDA in order to promote a more thorough understanding of problems and responsibilities of both professions in relation to postmortem examination and the respectful care of the deceased.

Recommendations developed by these committees will be submitted to the College of American Pathologists Board of Governors as well as to the National Funeral Directors Association House of Delegates.

The following is a summary of these recommendations:

- Define indications and contraindications for the performance of arterial embalming prior to autopsy.
- Reduce unnecessary procedural delays in an effort to shorten the time interval from death to release of the remains.
- Suggest and encourage the use of techniques that will facilitate appropriate autopsy practice while, if feasible, reducing technical difficulties for the embalmer.
- Promote practices that help facilitate prompt and accurate signing of death certificates.
- Encourage both professions to cooperate with and promote organ and tissue donor programs.

This document has been prepared based on recommendations of pathologists and funeral directors throughout the United States. It reflects their experiences in meeting the requirements of both professions in providing care for the deceased and their families.

Postmortem Procedures

Introduction

This document deals with conduct of postmortem procedures and is recommended to pathologists, other physicians, funeral directors, and embalmers. It is hoped that this publication will foster cooperation between the professions with respect to postmortem examination.

These guidelines, supplemented by *An Introduction to Autopsy Technique* (Hutchins, G. 1995) published by the CAP, provide a broad understanding and a realistic approach to the autopsy.

The value of the autopsy in establishing the cause of death is widely recognized. At the same time, our professions must consider applicable law as well as the wishes of the deceased and the family.

Today, most funeral directors or embalmers present no opposition to autopsies. Medical science has learned to define and treat diseases through knowledge obtained from the autopsies. Moreover, important information about the cause of death of individual decedents is frequently obtained at autopsy. These facts have aided immeasurably in diminishing previous opposition. Funeral directors and embalmers may be of considerable assistance procuring autopsy consent and in explaining how the family can assess the information derived from an autopsy.

It is important that pathologists and other physicians be cognizant of the role of the funeral director when death occurs. The bereaved family entrusts to his care details for preparation, funeral, and final disposition of the remains. Funerals are planned according to a carefully timed schedule. Such a schedule is predicated upon the prompt release of the body by the institution or the pathologist. An undue delay in the release of the body may upset plans that have been made, causing inconvenience, anguish, and concern to the bereaved family. Therefore, the time interval between death and the release of the remains should be kept as short as reasonably practical.

The funeral professional also should be aware of the role and responsibility of the pathologist in the performance of the autopsy. A hastily performed autopsy may overlook subtle and salient factors or evidence. It may reduce the value of the examination. The pathologist may also be faced with delays due to an inability to contact the next of kin, insufficient history, complex medicolegal issues, or time-consuming adjunctive studies. Organ and tissue procurements can also delay the ultimate release of the body.

Pathologists and funeral directors are encouraged to review periodically with their staff the recommendations set forth in this document.

General Considerations

It is always preferable, and in many circumstances mandatory, to perform an autopsy prior to, rather than after, embalming. Gross tissue changes are much better appreciated when the body has not been embalmed. Arterial embalming can alter the appearance of injuries as well as other gross and microscopic findings. Embalming may interfere with the collection of information vital to forensic investigations, family counseling, medical education, and research, particularly in infant and child deaths. Some types of specimens must be obtained before embalming. Accordingly, embalming prior to autopsy is

inappropriate whenever the death investigation requires fresh tissue or body fluids for toxicologic, microbiologic, cytogenetic, biochemical, or molecular genetic studies. Medicolegal cases should not be embalmed or altered in any way prior to autopsy.

In certain situations, arterial embalming prior to the autopsy can benefit both the mortician and the pathologist. In cases where the decedent was infected with Human Immunodeficiency Virus (HIV) or hepatitis, prior arterial embalming may help to decrease the potential for infections. When there is a significant delay between death and postmortem examination, the gross histological appearance will be far better preserved if the body has been arterially embalmed rather than refrigerated. Preliminary arterial embalming obviates the need to dissect and preserve the major branches of the aorta for later use during embalming. The deceased human body is subject to progressive skin changes (i.e., post mortem staining and lividity) that cannot be effaced by the embalmer. These are readily prevented by prompt arterial injection.

Refrigeration delays decomposition, but it also impedes and complicates the work of the embalmer. Therefore, prolonged refrigeration should be used in the funeral profession only when it is reasonably necessary and arterial embalming is not feasible. The body should be kept refrigerated at 4° to 8° C (38° to 40° F). A goal of six hours maximum delay between the death and embalming is ideal but often is not practical. To achieve this goal requires close cooperation and coordination of the efforts of all concerned

Care after Death

When the body is removed to the morgue, it should be placed supine with the head straight and elevated and the hands folded over the abdomen. In order to keep the hands and arms in this position, it is recommended that wide, cotton padded gauze strips be placed around the arms, above the elbows, and tied across the chest.

All externally visible medical devices should be left in place.

The body should be placed in an OSHA-compliant covering and be promptly refrigerated to minimize postmortem changes. A loose fitting impervious body bag is ample containment in most cases. A clean white sheet is recommended for covering the body. To ensure accuracy in identification before performing the autopsy, all bodies should be identified by wristband and/or toe tag.

If permission for an autopsy is sought, the nature and extent of the autopsy should in no way be misrepresented. The hospital staff should not use coercion or threats to obtain consent to an autopsy. Hospital employees should not attempt to influence relatives of the deceased in regard to the choice of a funeral home. In most cases, medicolegal autopsies do not require permission from the next of kin.

In those instances in which an autopsy is to be performed in the funeral home, the hospital should furnish the funeral director a duplicate signed autopsy permit. Families should be told that some funeral homes impose additional fees when an autopsy is performed, and they should be advised to contact the funeral home if this possibility is of concern. Workplace safety, as required by OSHA, is the joint responsibility of the pathologist and the funeral home when an autopsy is performed in the funeral home.

Funeral Director

The funeral director should not attempt to dissuade the family from granting permission for an autopsy or attempt to effect a change of mind once permission has been granted. The funeral director should not call at the hospital for the body until release has been obtained. It is recommended that the funeral director communicate directly with the pathologist if any question arises in connection with the performance of an autopsy. As a convenience to the family and as a courtesy to the pathologist, the funeral director may allow an autopsy

or external examination to be performed in the funeral home.

If, for urgent reasons such as out-of-town transfer of the body, preparations must be expedited, the pathologist should be notified in order to facilitate cooperation with the funeral director in timely release of the body.

Inquiries by the family concerning autopsy findings should be referred by the funeral director to the attending physician or the pathologist.

Under no circumstances should a funeral director allow an undraped autopsied body to be viewed by other than duly authorized personnel, physicians, and law enforcement officers. Nor should the director discuss with the family of the deceased the details or the extent of the autopsy. Except for legally required identification, families should be encouraged to view the body at the funeral home rather than the morgue.

Problems created by autopsy techniques should be candidly discussed and resolved directly between the funeral director and the pathologist. The funeral director should refrain from embalming the cavities immediately following arterial injection if there is a reasonable expectation that authorization for an autopsy might be forthcoming. The funeral director or embalmer may also recognize medicolegal cases that may not have been reported to the local coroner/medical examiner. A funeral director/embalmer who suspects that a deceased person may have died in a suspicious manner is obliged to notify local authorities. Vigilance may facilitate the proper investigation of suspicious deaths.

Pathologist

When the pathologist anticipates a delay in autopsy performance, the pathologist should so notify the funeral director. In a medicolegal autopsy, extensive dissections may be necessary to determine the cause of death, document the extent of injuries, or recover projectiles. Where an autopsy that may complicate

embalming procedures is contemplated, the pathologist should promptly communicate with the embalmer.

Upon completion of the examination, the pathology department, hospital, coroner, medical examiner, or other facility should notify the funeral director. The funeral director should be made aware of any potential hazard such as contagion or radioactivity that might be present. The pathologist should promptly transmit the findings to the attending physician in order to facilitate the prompt completion of the death certificate.

Autopsy incisions should be sharply and cleanly cut. A "Y" incision is recommended for routine use in both sexes. In women, consideration must be given to the possible type of clothing that might be used, as well as breast development, and concealment of the sutured incision. A modified "Y" incision might be optimal in these circumstances. Non-routine incisions are sometimes employed, as needed in the judgment of the pathologist, or as stipulated by the terms of the autopsy permit.

Should it be necessary to turn the body over, the forehead should be placed on a padded support, sufficiently high to prevent the face from touching the table. Care should be exercised to protect the entire face and forehead from possible bruises, abrasions, or other marks.

In the performance of a cranial examination, the scalp should generally not be reflected anterior to a normal hairline. Prolonged reflection beyond this point may create a crease in the skin that may be difficult for the embalmer to efface. The recommended technique for cranial examination is a transverse incision of the scalp, made from mastoid to mastoid, posterior to the vertex of the skull. In the removal of the calvarium, the temporal muscles should generally not be excised; rather, a single horizontal cut with the reflection of the muscles should be made to allow for appropriate saw cuts. To avoid overriding of the replaced calvarium, it is suggested that the occipital bone be cut as far posteriorly as possible. Anterior cuts should always be

above the hairline. The lateral cuts through the calvarium in the temporal area should form an obtuse angle. Upon completion of the examination, a small amount of absorbent material should be placed within the cranial cavity and the calvarium replaced with a few sutures in the scalp to hold the calvarium in position temporarily. During the performance of the cranial examination of an embalmed body, care should be exercised to minimize distortion of facial features.

Incisions in the posterior or lateral abdominal or thoracic walls should be avoided, if possible. Incisions close to the anterior midline should be utilized whenever possible. The breast plate should be disarticulated at the sternoclavicular joints and completely removed. Upon completion of the autopsy, the breast plate should be replaced. The testes should be removed through the inguinal canals. In removing the rectum, the stump should be ligated and care taken not to cut the rectum too close to the anus. The pelvic floor should not be cut unless needed in special cases such as forensic autopsies or evaluation of malignancies or complex malformations of pelvic organs. Similar procedures should be utilized in removing the uterus. It is recognized that in some cases (e.g., sex crimes), a more detailed dissection of the pelvic region may be indicated.

The key to successful embalming is adequate access to large arteries. Long stumps with ligatures should be left on the major vessels arising from the aortic arch whenever the arch must be removed. In removing the neck organs, the carotid and subclavian arteries should be dissected free and left intact. Major branches from these vessels should be tied. Unless necessary, the common, internal and external iliac arteries should not be incised or severed as these arteries are used for injection in the inferior portions of the trunk and extremities. Transection of peripheral blood vessels is to be avoided if at all possible. The carotid arteries may be tied off with long ligatures. If the carotid is cut, the stump may be identified and tied off with a long suture.

Medicolegal autopsies often necessitate complex dissections, which potentially can interfere with funeral home preparation. The pathologist should attempt to preserve the necessary vessels and should work with the funeral director to identify problems and to optimize subsequent body preparation. Should an unusual cut or mark be made on the body, the funeral home should be alerted so that the embalmers can devise strategies for concealment. This courtesy will promote continuing good relations between funeral director and pathologist.

Upon completion of the autopsy examination, all fluid should be aspirated from the body cavities. Following examination, the organs may be inserted into a heavy plastic bag and placed within the body cavity. Incisions should then be closed with a running suture. The body should be rinsed with cold water, removing all bloodstains and other debris.

Cooperation

Meetings of pathologists, hospital administrators, and funeral directors at the local level are desirable to develop better communications, promote mutual understanding, and modify these guidelines as needed to meet the local situation. Such meetings could also mediate disagreements and problems that cannot be reasonably handled by direct discussion between the funeral director, the pathologist, and the administration of the hospital. Difficult problems at the local level may be referred to the appropriate professional organization at the state or national level.

These guidelines are intended to improve cooperation between the professions involved, with an aim toward providing better public service in the care of the dead and a concern for the living.