



Pregnancy Loss and Infant Death Alliance

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Position Statement

Delaying Postmortem Pathology Studies



August 2016

Position

Delaying Postmortem Pathology Studies

When bereaved parents spend time with their baby's body after death (for any length of time), there is little or no impact on postmortem pathology studies.

Executive Summary

When parents hold their baby's body after death (for any length of time), the impact on postmortem pathology studies is minimal to nonexistent. In most cases, etiologic evaluations can be delayed for hours or a day without significant consequence on their results. In specific cases, some examinations will be of greater value if performed within 24 hours after death, and the pathologist should be contacted early to give advice. Especially when early autopsy is indicated or required, the parents benefit from meeting the pathologist who will perform the autopsy. Making personal contact enables the pathologist to reassure the parents that she or he will take good care of their baby, and this contact can increase autopsy rates.

There is no reason that parents cannot see and hold their precious baby after an autopsy. A nurse's accurate description of what they can expect and the pathologist's careful closure of suture lines are key to post-autopsy care. The contents of written and verbal information for parents include the following:

- Internal organs are removed for examination; therefore, the baby may feel lighter when in the parents' arms after an autopsy.
- The chest area typically includes a Y-shaped incision, sutured closed when the autopsy is complete. A large dressing is placed over the incision for drainage and protection.
- Cranial examination (an autopsy of the baby's brain) may be optional. When done, a simple cap knitted in various sizes to ensure one that fits, is placed on the baby's head. The cap will hide the suture lines.
- As with many options after a baby dies, parents benefit from knowing what to expect. Health care providers should describe the baby's appearance and support whatever decision the parents make about whether or not they wish to undress their baby after an autopsy. A nurse's gentle guiding can serve to assuage a parent's uncertainty.
- Parents should feel that they can have contact with their baby at any step in the process: after autopsy, at the funeral home, anytime before the casket is sealed or the baby goes to the crematorium.



In some cases, a sound and reasonable alternative to autopsy is a comprehensive postmortem external exam performed by an experienced clinical geneticist.

After delivery, and until the mother is discharged, the baby's body can stay in the room with the parents as long as they desire. With a planned autopsy, when the baby is not being cradled, cooling is advised in order to maintain the integrity of the skin and to reduce the normal (though minor) proliferation of any pathogens that were present at the time of death. If the parents wish, the baby's body can be placed in a warming unit or wrapped in a warm blanket prior to being held.

Background and Significance

Many parents benefit from repeated and extended opportunities to have close contact with their deceased baby's body, including touching, examining, holding, cuddling, and kissing. These things can be done before or after an autopsy when healthcare providers carefully adhere to the guidelines listed in the executive summary (p. 1). For parents who want to have close and extended contact with their baby, this nurturing experience affirms their baby's existence and importance, validates their role as parents to this child, offers meaningful opportunities to express their love and devotion, and cultivates treasured keepsakes and memories. This experience can also help parents to process the traumatic events surrounding their baby's death and to experience a more gradual goodbye, both of which are productive components of healthy grieving.

Parents benefit from having their cultural and spiritual needs respected. In order to honor the parents' preferences around the care of their baby's body after death, healthcare providers should ask each family to express their wishes regarding traditions and beliefs.

Implications for Practice

Knowledgeable pathologists, geneticists, and genetic counselors serve as resources when parents have questions or concerns. The following guidelines summarize tests that may be performed on both the mother and baby, useful information for both parents and healthcare providers:

- When autopsy is indicated or required, contact the pathologist to request advice on whether there are some examinations that will be of greater value if performed within 24 hours after death. Parents benefit from meeting the pathologist who will perform the autopsy; especially when samples need to be collected within 24 hours, the pathologist can give the parents realistic and reassuring information about what the autopsy consists of and what the baby will look like when he or she is returned to the parents.



- Most etiologic evaluations can be delayed for hours without significant consequence on their results, including radiographs, postmortem assessment, clinical examination, and maternal examinations, such as Kleihaur-Betke testing.
- Delays can affect microscopic examination of tissues; however, microscopic studies of tissues from the baby are rarely crucial in identifying a cause of death, and these studies are not significantly impeded by delaying examination.
- As cytogenetic or other genetic testing does not require cell growth, collection of samples for these studies can be delayed.
- If desired, skin samples for genetic and metabolic studies can be obtained by the pathologist quickly and unobtrusively so that parents can spend as much time as they want with their baby before and after the procedure.
- When obtaining tissue samples for cytogenetic evaluation after an intrauterine death, the most crucial samples are *placental*. These should be obtained as soon as possible after delivery, and most often, the placental samples alone will be sufficient.
- After an intrauterine death several or more days before delivery, postponing autopsy for another day or more will not affect test results.
- Current cytogenetic methods do not require growth of tissues (e.g., fluorescent in situ hybridization, microarray comparative genomic hybridization) and delays will not affect postmortem evaluation.

References

- Abdalla, E. M., El Desouky, L. M., & Hassanein, N. M. (2015). Postmortem clinical examination by experienced clinical geneticists as an alternative to conventional autopsy for assessment of fetal and perinatal deaths in countries with limited resources. *The Turkish Journal of Pediatrics*, 57(2), 146–153.
- British Columbia Reproductive Care Program. (2000, May). *Perinatal mortality guideline 5: Investigation and assessment of stillbirths*. Retrieved from Perinatal Services BC website: <http://www.perinatalservicesbc.ca/Documents/Guidelines-Standards/PerinatalMortality/StillbirthInvestAssess.pdf>
- Cernach, M. C., Patrício, F. R., Galera, M. F., Moron, A. F., & Brunoni, D. (2004). Evaluation of a protocol for postmortem examination of stillbirths and neonatal deaths with congenital anomalies. *Pediatric and Developmental Pathology*, 7(4), 335–341.
- Davis, D. L., & Helzer, S. (2010). Perinatal death and bereavement care. In E. S. Gilbert (Ed.), *Manual of high-risk pregnancy & delivery* (5th ed.). New York, New York: Mosby/Elsevier.



- Désilets, V., Oligny, L. L., Genetics Committee of the Society of Obstetricians and Gynaecology Canada, Family Physicians Advisory Committee, & Medico-Legal Committee of the SOGC. (2011). Fetal and perinatal autopsy in prenatally diagnosed fetal abnormalities with normal karyotype. *Journal of Obstetrics and Gynaecology Canada*, 33(10), 1047–1057.
- Gagnon, A., Wilson, R. D., Allen, V. M., Audibert, F., Blight, C., Brock, J. A., . . . Society of Obstetricians and Gynaecologists of Canada. (2009). Evaluation of prenatally diagnosed structural congenital anomalies. *Journal of Obstetrics and Gynaecology Canada*, 31(9), 875–889.
- Heazell, A. E., McLaughlin, M. J., Schmidt, E. B., Cox, P., Flenday, V., Khong, T. Y., & Downe, S. (2012). A difficult conversation? The views and experiences of parents and professionals on the consent process for perinatal postmortem after stillbirth. *BJOG: An International Journal of Obstetrics and Gynaecology*, 119(8), 987–997.
- Keeling, J. (Ed.). (2001). *Fetal and neonatal pathology*. London: Springer.
- Kumar, M., Singh, A., Gupta, U., Anand, R., & Thakur, S. (2015). Relevance of labor room fetal autopsy in increasing its acceptance. *Journal of Maternal, Fetal, and Neonatal Medicine*, 28(3), 344–349.
- Royal College of Obstetricians Gynaecologists & Royal College of Pathologists. *Fetal and Perinatal Pathology: Report of a joint working party*. Retrieved from Royal College of Obstetricians Gynaecologists website:
<https://www.rcog.org.uk/globalassets/documents/guidelines/wprfetalpathology2001.pdf>
- Warland, J., & Davis, D. L. (2011). *Caring for families experiencing stillbirth: A unified position statement on contact with the baby. An international collaboration*. Retrieved from the Resolve Through Sharing website: <http://www.gundersenhealth.org/resolve-through-sharing/publications-research-resources/articles-and-position-papers>
- Wigglesworth, J. S., & Singer, D. B. (Eds.) (1998). *Textbook of fetal and perinatal pathology*. Boston, Massachusetts: Blackwell Science.
- Wilke, J., & Limbo, R. (2016). *Resolve Through Sharing® position statement on cooling a baby's body after death* (Rev. ed.). La Crosse, WI: Gundersen Lutheran Medical Foundation, Inc.
- Wisconsin Stillbirth Service Project (WiSSP). (2016). *Most Often Asked Questions about Stillbirth Evaluation*. Retrieved from WiSSP website:
<http://www2.marshfieldclinic.org/wissp/commonly.htm>



Wright, C., & Lee, R. E. J. (2004). Investigating perinatal death: A review of the options when autopsy consent is refused. *Archives of Disease in Childhood Fetal and Neonatal Edition*, 89, F285.

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Davis, D., Frøen, J. F., Ives-Baine, L. A., Josephson, K., Limbo, R., Pauli, R. M., . . . Walter, M. (2016). *Pregnancy Loss and Infant Death Alliance (PLIDA) position statement on delaying postmortem pathology studies* (Rev. ed.). Retrieved from the PLIDA website: <http://www.plida.org/position-statements/>

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