WHAT IS AN AUTOPSY?

“A medical-surgical procedure by a physician for the welfare of the living through the study of those patients for whom all our current knowledge and technology were inadequate.” –Autopsy Committee of the College of American Pathologists
Autopsy versus Necropsy

Technically, necropsy ("the examination of a body after death")

AUTOPSY = NECROPSY of human

Objectives:
Know:
1. How to Prepare
   - Paperwork, Tools, Identification, X-Ray
2. How to perform procedure
   - Measurements, Incisions, Rokitansky, Special specimen collection, Closing
3. How to handle special organs
   - Heart, brain

<20 weeks gestation - Abortus
20 weeks gestation to birth - Fetus
Birth to 1 month - Neonate
1 month to 1 year old - Infant
>1 year to puberty (developmental) or 18 years old (legal) - Child
1. How to Prepare:
   - Need consent
     1. Patient ID
     2. Limitations
     3. Valid signature and witnessing

May also need:
Medical Examiner Waiver Number
(if death under unusual circumstances)

Academic (Medical) Autopsy
versus
Forensic Autopsy


1. How to Prepare:

**Paperwork**
- Clinical history
- Admitting H&P
- Discharge Summary
- Death Note
- Identify clinical questions to be answered by autopsy

**Paperwork: Autopsy Documentation Forms**

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**References**
PEDIATRIC AUTOPSY

1. How to Prepare:
   Paperwork: Autopsy Documentation Forms

   --from patientband.co.uk

1. How to Prepare:
   Tools:

   --from "Perinatal autopsy, techniques, and classifications. An Aden
   in The Pediatric and Perinatal Autopsy Manual. Cohen and
   Scheinberg, eds. 2014. Cambridge University Press.

1. How to Prepare Identification:

   "Those who put safety first in selecting patient ID bands, please raise your hand."
1. How to Prepare Identification—recommend photographing

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1. How to Prepare X-Ray

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2. How to Perform Measurements

What you should know about the birth defect tied to Zika virus

SMITH-LEMLI-OPITZ


PEDIATRIC AUTOPSY

2. How to Perform Measurements

Fetal Alcohol Syndrome: Facial Dysmorphism

- Microcephaly
- Low nasal bridge
- Epicanthal folds
- Thin upper lip
- Micrognathia

Syndrome – Beckwith-Wiedemann

- Ear anomalies

Potter Sequence
2. How to Perform Procedure


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2. How to Perform
Special specimen collection:

Blood, Skin, Lung, Liver, *Skeletal Muscle
PEDIATRIC AUTOPSY

2. How to Perform - Closing:

3. Special organ handling
   Heart:
   Perfusion fixation system
3. Special organ handling

Brain:

Hang from string through
Circle of Willis, ends of string over
Bucket edge, held in place by lid

Question 1:
Name a good resource for pediatric autopsy:

a. Gilbert-Barness books
b. Institutional policies and procedures
c. The clinical team
d. The Medical Examiner’s office
e. All of the above
Question 2:
Name a possible cause for microcephaly:

a. In utero infection
b. Genetic disorder
c. In utero toxin or malnutrition
d. In utero hypoxemia
e. All of the above

Question 3:
What anomaly may be identified by lifting up the heart to the right in situ (Taussig Maneuver)?

a. Persistent left superior vena cava
b. Single cardiac ventricle
c. Anomalous pulmonary venous return
d. Zika virus infection
e. Smith-Lemli-Opitz syndrome
Question 3: What anomaly may be identified by lifting up the heart to the right in situ (Taussig Maneuver)?

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   b. Smith-Lemli-Opitz syndrome

Summary:
1. Take time to prepare
2. Take time for external examination and documentation
3. Rokitansky
4. Special specimen collection, processing
5. Putting it all together

THANK YOU!