AUTOPSY - INTRAUTERINE DEMISE PROTOCOL

M.C. Fishbein, MD (March 08)
J.D. Goldstein MD and M.C. Fishbein MD (Revised 09 2015, May 2017, May 2019)

UCLA DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE
AUTOPSY SERVICE

[PLEASE USE ADDITIONAL SHEETS AS NEEDED TO FULLY DESCRIBE ABNORMAL FINDINGS]

The body is that of a small for gestational age/macrosomic/normally developed/dysmorphic male/female infant weighing g.
The crown-rump length is cm and the crown-heel, cm. The occipito-frontal circumference is cm.
Maceration is absent/mild/moderate/severe with .
Rigor is absent/mild/moderate/severe.
Lividity is absent/mild/moderate/severe (state site)
Edema is absent/focal/global (fetal hydrops).
The skin is .
(Describe any localized skin lesions, generalized discoloration, extent and distribution of sloughing, if macerated etc.)

The head is normo/micro/macro cephalic with/without molding or distortion.
The anterior fontanelle is x cm, the posterior fontanelle is x cm, and the cranial sutures are overriding/mobile/normal. Hair (describe amount and distribution, color, quality)
The eyes are normally spaced/show hypertelorism; the inner canthal distance is cm and the outer canthal distance cm.
The palpebral fissures are normal/upslanted/ downslanted, and the eyelids are fused/separate.
The pupils are equal or unequal and measure and on the left and right sides, respectively. [measure only if unequal]
The sclerae are white/discolored ; the corneas are clear/cloudy; and the irides are dark/light. The ears are not low set or posteriorly rotated. The pinna are soft/folded/firm
The nose is normally formed.
The mouth is edentulous.
The lip and palate are intact.
The philtrum measures 0. cm.
The thorax appears symmetric/distorted/narrow/broad. The chest circumference is cm. The internipple distance is cm.
The abdomen is flat/scaphoid/protuberant/markedly distended. The abdominal circumference is cm. There is no/an omphalocele or abdominal wall defect.

[Measure if present]
The segment of umbilical cord, measures \( x \) cm, and vessels are identified.
The back appears normal. No exposed neural tube defect or abnormal spinal curvature are present.
The anus is patent/imperforate.
The external genitalia are normally formed for a male/female. The testes are undescended. OR Both/right/left testes/ testis are/is in the scrotum.
Inguinal Hernia is absent/present.
Extremities are unremarkable without contractures, syndactyly, polydactyly or clinodactyly. No palmar crease or sandal toe deformity are present. The foot length is cm.
There are no other findings on external examination or .

A fetal radiograph was obtained which shows .

The usual Y-shaped thoracoabdominal incision and U-shaped biparietal scalp incisions are made.

**PERITONEAL CAVITY:** The peritoneal surfaces are smooth and dusky/glistening.
The peritoneal cavity contains \( \_ \_ \) ml of clear/cloudy/yellow/serosanguineous fluid/or blood.
The liver is normally configured and is anatomically normally situated.
The spleen is normally configured and is anatomically normally situated.
The stomach is externally unremarkable/distended
The bowel is normally rotated without redundant mesentery such that the small intestine and large intestine are normally situated and the appendix is the in the right lower quadrant/pelvis.

The mesenteric lymph nodes are inconspicuous/unremarkable/diffusely enlarged.

**PLEURAL CAVITIES:** The visceral and parietal pleural surfaces are smooth and dusky/shiny with/without petechiae.
The right pleural cavity contains ml of clear/serous/serosanguineous fluid (or blood).
The left pleural cavity contains ml of clear/serous/serosanguineous fluid (or blood).
The lungs occupy 95% of their respective pleural cavities.
The right lung has ___ lobes and the left lung has ___ lobes.

**PERICARDIAL CAVITY:** The pericardial surfaces are smooth and dusky/shiny.
The cavity is free from adhesions and contains ml of clear/serous/serosanguineous fluid (or blood).

**CARDIOVASCULAR SYSTEM:**

**HEART:** The heart weighs g. The viscero-atrial situs is solitus/inversus/ambiguous.
There is a D ventricular loop with the cardiac apex and left ventricle to the left and a solitus relationship of the great arteries with the pulmonary artery anterior and to the right of the aorta.
(If other than "solitus", "D", and "solitus", describe more thoroughly the site of the apex, position and relationship of the ventricles, and great arteries).
The epicardium is smooth without/with a scant amount of adipose tissue.
There are/no epicardial petechiae.
The atria *are/do not appear* distended.
The foramen ovale is patent.
The valve of the foramen ovale appears *sufficient/fenestrated/deficient* over the ostium.
There is no atrial septal defect.
The coronary sinus ostium is normal in size and location.
   The mural and valvular endocardium is smooth *and dusky/translucent/white*.
The atrioventricular valves are thin and delicate with normal appearing chordae tendinae.
Both semilunar valves contain three cusps.
The ventricular chambers are not dilated.
The myocardium is *brown and unremarkable*.
There is no ventriculoseptal defect.
The measurements of the heart in cm are as follows:
Tricuspid Valve cm, Pulmonic Valve cm, Mitral Valve cm, Aortic Valve cm, Right Ventricular Myocardial wall cm, Left Ventricular Myocardial wall cm.
The venae cavae enter the right atrium
The ductus venosus is patent.
All four pulmonary veins enter the left atrium; there is no anomalous pulmonary venous connection.
The coronary ostia are in normal position.
The coronary arteries have a *right/left/dominant or aberrant* distribution on the epicardial surface.
The great vessels arise from a *left/right* sided aortic arch in a normal manner.
The caliber of the ascending aorta is normal, and there is no aortic coarctation.
The ductus arteriosus is patent.
The branch pulmonary arteries arise normally from the pulmonary trunk and are of normal caliber.

**RESPIRATORY SYSTEM:**
The trachea and major bronchi are lined by *smooth/tan/purple/mucosa*, their lumens contain fluid. There is no tracheal-esophageal fistula.
**LUNGS:** The weight of the lungs is: right ______ g; left ______ g. The cut surfaces are _airless/hemorrhagic_. The intraparenchymal bronchi and vessels appear normal. There are no cysts or localized lesions.

**HEMATOPOIETIC AND LYMPHATIC SYSTEM:**

**THYMUS:** The thymus weighs ______ g.
The external surface is _ivory/rose colored_ and lobulated _without/with_ petechiae.
The cut surfaces are _soft and unremarkable_.

**SPLEEN:** The spleen weighs ______ g.
The capsule is _dusky/shiny_.
On section the parenchyma is _soft and deep red_ without localized lesions.
The malpighian corpuscles are _inconspicuous_.

**LYMPH NODES AND MARROW:** The lymph nodes are _inconspicuous/tan and soft_.
Bone marrow is _red_.

**GASTROINTESTINAL SYSTEM:**
The mucosa of the esophagus is _grey with longitudinal folds_ and its lumen is _empty/contains_ ______ fluid.
The mucosa of the stomach is _unremarkable or_ ______ and its lumen contains ______.
The length of the small bowel is ______ cm, the large bowel is ______ cm. The mucosa of the small intestine is _unremarkable_ and its lumen contains ______. There is no Meckel diverticulum.
The mucosa of the large intestine is _unremarkable_ and its lumen contains _green meconium_.

**LIVER:** The liver weighs ______ g.
The capsule is _dull/shiny and smooth/disrupted_.
On section the parenchyma is _homogenous and brown without cysts, other localized lesions or fibrosis_.
The bile, which is _green_, is freely expressed from the gallbladder into the duodenum.

**PANCREAS:** The pancreas is tan and coarsely lobulated. On section, _it is ivory/light tan and otherwise unremarkable_.

ENDOCRINE SYSTEM:

ADRENALS: The weight of the adrenals is: right g; left g. They are normally shaped. The cut surfaces reveal bright yellow fetal cortex and thin brown central zones.

GENITOURINARY SYSTEM:

KIDNEYS: The weight of the kidneys is: right g; left g. The renal arteries and veins are free from thrombi. The capsules strip easily from the smooth renal surfaces that exhibit fetal lobulations. On section the cortex and medulla are clearly demarcated. There are no cysts or localized lesions. The renal pelves and ureters are lined by grey, translucent mucosa.

BLADDER: The mucosa of the bladder is ivory. The ureteral orifices and urethra at the trigone are normal. The urachus is closed/patent.

GENITALIA: The prostate gland is small, firm and reveals no gross abnormalities. The testes are descended in the scrotum/in the inguinal canal/intra-abdominal. OR

The vaginal mucosa is unremarkable. The uterus, cervix and fallopian tubes have a normal infantile appearance with an elongated cervix and small fundus. The ovaries are thin with small/without cysts.

ORGANS OF THE NECK: The thyroid and larynx reveal no gross abnormalities. The submandibular glands are tan and unremarkable. (delete if not examined) # parathyroids are identified.

BRAIN: The soft tissues of the scalp are unremarkable/edematous/hemorrhagic. The sutures are separated by cm.

The brain is initially examined fresh; it weighs . Please see the Neuropathology Report, when issued, for further description.

The dura mater is unremarkable. The dural sinuses are free from thrombi.
The falx cerebri and the tentorium cerebelli are intact. The pia arachnoid is clear. There is no subarachnoid hemorrhage nor exudate. The convolutions and sulci are appropriate for gestational age.

The middle ears are not examined.

A segment of the thoracoabdominal spinal cord is removed by the anterior approach and reveals no gross abnormalities.

The pituitary gland is unremarkable.

MUSCULO-SKELETAL SYSTEM:

BONES: The vertebral bodies are normally formed, the joint spaces are unremarkable, and the marrow space is deep red. No other bones are examined.

ADDITIONAL AREAS OF DISSECTION OR SPECIAL STUDIES:

Placental Examination (S): 

PHOTOGRAPHS:

MICROSCOPIC BLOCKS TAKEN:

AUTHOR: Typist

Date

WEIGHTS AND MEASUREMENTS WITH REFERENCE RANGES

(Paste in the output from the Gestational Age Anthropometry Website)

Reference range data generated from the Gestational Age Anthropometry Website
Copyright © 2013 University of Alabama at Birmingham.