

**ANATOMIC PATHOLOGY UNIT**

**DEPARTMENT OF HUMAN PATHOLOGY**

**SCHOOL OF MEDICINE**

**COLLEGE OF HEALTH SCIENCES**

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**PAEDIATRIC AUTOPSY TEMPLATE (INCLUDES NEONATE, FETUS)**

External Examination

For fetuses: The body (\_\_\_\_ cm; normal, \_\_\_\_ cm; \_\_\_\_ g; normal g) is that of a well-developed/other, nonmacerated/macerated male/female fetus.

For infants/children: The body (\_\_\_\_\_ cm; normal, \_\_\_\_ cm; \_\_\_\_ kg; normal, \_\_\_\_ kg) is that of well-nourished/poorly nourished/cachectic, well-developed/other mature/premature/

postmature boy/girl infant/childSkin color is white/tan/yellow/brown. The skin shows no

irregularity/other. (For fetuses/infants: The head is dormocephalic/dolichocephalic/asymmetrical/brachycephalic/other. The anterior

fontanel is open and measures \_\_\_\_ cm/closed. The posterior fontanel is open and measures \_\_\_\_ cm/closed. The fontanels are flat/depressed/bulging.) (For child: The head is symmetrical/other.) The face is normal, features present and symmetrical/other. The

irides are (color), and the pupils are equal/unequal. The conjunctivae appear pink/abnormal, and the sclerae are clear/icteric/blue. Ear positions are normal/low set. The shape of the

ears is normal/other. (For fetus/infant: Their development is mature/immature.) The external auditory canals are patent/imperforate on right/imperforate on left. The choanae are patent/

imperforate on right/imperforate on left. The configuration of the mouth appears normal/other. The chin is well developed/small. The palate is normal/high and arched but complete/incomplete. The neck is normal/stiff/other. The trachea is straight and in the

midline/deviated to the right/deviated to the left. The thorax is symmetrical/asymmetrical, being larger on right/asymmetrical, being larger on left. The nipples are appropriately

spaced/widely spaced. (For female child: Breast development is absent/Tanner stage 1/2/3/4/5.) The abdomen appears flat/distended and is palpably soft/other. The liver edge is not palpable/palpable below the right costal margin. The spleen tip is not palpable/palpable below the left costal margin. (For fetus and neonate: The umbilicus contains a stump of umbilical cord showing three vessels/contains a stump of umbilical cord showing

two vessels/other.) The external genitalia are normal/other for a boy/girl. The urinary meatus is patent/nonpatent/other. The rectum and anus are patent/nonpatent. The spine appears

straight/scoliotic/kyphotic/lordotic and complete/other. The extremities are symmetrical and well developed/other. The digits and palmar markings appear normal/other. (For child: There is no/is palpable cervical, axillary, or inguinal lymphadenopathy.)

Anthropometric Measurements (See Appendix below)

(For fetus/infant: The following additional measurements are made: crown-rump, \_\_\_\_\_ cm; head circumference, \_\_\_\_\_ cm; outer canthal distance, \_\_\_\_\_ cm; inner canthal distance, \_\_\_\_\_ cm; palpebral fissure length, \_\_\_\_\_ cm; philtral length, \_\_\_\_\_ cm; chest circumference, \_\_\_\_\_ cm; abdominal circumference,\_\_\_\_\_ cm; foot length, \_\_\_\_\_ cm.)

Scars and Identifying Marks

Describe scars and identifying marks.

Evidence of Therapeutic Intervention

The following medical paraphernalia are in place: (Describe intravenous or intraarterial lines, Foley catheters, endotracheal tubes, recent surgical incisions, and so forth.)

Evidence of External Trauma

See Trauma Template, later.

Note: Specific observations described in the adult autopsy section are not necessarily repeated here.

Thoracic Cavity

The thymus (\_\_\_\_\_ g; normal, \_\_\_\_\_ g) occupies its usual position/is not identifiable grossly. (For infant/child: The parenchyma is pale gray and lobulated/other.) The parietal pleural

surfaces are glistening and smooth/other. The right hemithorax contains (amount and type of fluid); the left contains (amount and type of fluid). The lungs appear to occupy a normal/small volume in the thoracic cavity. The mediastinum is unremarkable/other.

The pericardial sac contains (amount and type of fluid). Its surfaces are smooth and glistening/other. The heart is located in its usual anatomic position in the midline (fetus/neonate)/in its usual position in the left chest (older infant/child)/in the right chest

with its apex pointing to the left/right. (For infant/child: Hilar and mediastinal lymph nodes are small and gray.)

Cardiovascular System

On examining the external surfaces of the heart (\_\_\_\_\_ g; normal,\_\_\_\_\_ g), the atrial appendages are in their normal positions/other. The great vessels are normally related/other. The epicardial surface is glistening and smooth/other. The coronary arteries course in the usual fashion/other over the surface of the heart. The superior and inferior venae cavae and coronary sinus connect with the right atrium in the usual fashion/other. The diameter of the coronary sinus is normal/large/small. The interatrial septum is intact with/without a patent oval foramen/has an atrial septal defect. The right atrioventricular connection is present, and the leaflets of the tricuspid valve are thin and delicate/other. The right ventricular cavity is normal in size/dilated. The wall is of normal thickness/other, and its myocardium has a homogeneous red color/other. The interventricular septum is intact/has a perimembranous

ventricular septal defect/has a muscular ventricular septal defect. The right ventricular outflow tract is unremarkable/narrowed. The pulmonary valve contains three thin and

delicate semilunar leaflets/other. The pulmonary artery is of normal caliber and configuration/other. Its intimal surface is glistening and smooth/other. The ductus arteriosus is patent/stenotic/closed. Four pulmonary veins connect with the left atrium in the usual manner/other. The chamber size is normal/large/small. The left atrioventricular connection is normal with thin and delicate mitral valve leaflets/other. The tendinous cords appear normal/thickened and fused/abnormally long and thin. The left ventricular cavity is of normal size/dilated. The wall is of normal thickness/hypertrophied/other, and its myocardium has a homogeneous red color/other. The left ventricular outflow tract appears normal/appears stenotic/shows the ventricular defect just inferior to the aortic valve. The aortic valve contains three thin and delicate semilunar leaflets/other. The ascending aorta is of normal caliber/small/dilated and arches over the left main bronchus/right main bronchus before descending along the left/right side of the vertebral column. The major arteries come off the aorta in the usual configuration/other. The descending aorta gives off the usual branches/other, and its intimal surface is glistening, smooth, and intact/other.

Respiratory System

The larynx is unremarkable/other. The trachea is of normal/other caliber and courses in the usual/other fashion. The lungs (right,\_\_\_\_\_ g; left, \_\_\_\_\_ g; normal combined weight, \_\_\_\_\_ g) contain the usual lobes and fissures/show abnormal lobation, and the visceral pleural surfaces are glistening and smooth/other. The parenchyma is soft and pale red/other. The bronchi and vessels appear patent and of normal caliber/other

Peritoneal Cavity

The peritoneal surfaces are glistening and intact/other. There is (amount and character of peritoneal fluid). There is no/is mesenteric or periaortic lymphadenopathy. Liver and Biliary System The liver (\_\_\_\_\_ g; normal \_\_\_\_\_ g) is normally positioned in the upper right/other, the stomach on the left midline and symmetrical in the left upper quadrant/other. The shape of the liver is normal/other; its surface is smooth and glistening/other. Cut sections show normal/congested/other parenchyma. On the inferior aspect, the vascular pattern is normal/other. The gallbladder is present/absent. The biliary tree is patent

into the duodenum/other.

Pancreas

The pancreas (\_\_\_\_\_ g; normal \_\_\_\_\_ g) is located normally, within the duodenal sweep/other. Its surface and parenchyma appear gray-white and normally lobulated/other.

Spleen

The splenic tissue (\_\_\_\_\_ g; normal, \_\_\_\_\_ g) consists of a solitary spleen of normal shape/two small spleens/several spleens of varying sizes. (For infant/fetus: Cut sections are unremarkable/other.) (For child: Splenic parenchyma is dark red/other. The follicles are

small/other and trabeculae are delicate/other.)

Gastrointestinal System

The tongue is papillated/smooth. The esophagus courses normally to enter the stomach/other. (For child: Its mucosal surface appears intact/other.) The shape of the stomach is normal/other. The gastric mucosa is unremarkable/other. The pyloric canal is patent/

obstructed. The duodenum courses in the usual fashion/abnormally and is of normal/other caliber. The jejunum and ileum are of normal caliber/other. (For child: The mucosal

surfaces are unremarkable/other.) The cecum and appendix are/are not fixed in the right lower quadrant and have the usual/other configuration. The colon is of generous/other caliber, and courses normally/other. (For child: Its mucosal surface is unremarkable.)

The rectum is patent/imperforate.

Genitourinary System

The kidneys (right, \_\_\_\_\_ g; left, \_\_\_\_\_ g; normal combined weight, \_\_\_\_\_ g) are located in their usual retroperitoneal position/other. The surface of each kidney is normal/shows normal

fetal lobulations/other. On hemisection there are clearly demarcated corticomedullary junctions/other, normal pyramids and collecting system/other. The ureters are patent/other and connected to the bladder in the usual fashion/other. The urinary bladder appears normal/other. The urethra is patent/other. For Males: The prostate is small, firm and unremarkable/other. The testes (right, \_\_\_\_\_ g; left, \_\_\_\_\_ g; normal combined weight, \_\_\_\_\_ g) are located within the scrotal sac bilaterally/within the inguinal canal/within the abdomen. For Females: The uterus, tubes, and ovaries are in their usual relative position within the pelvis/other. The vagina and cervix appear normal/other. The uterus is normal/other in shape. The ovaries (right, \_\_\_\_\_ g; left, \_\_\_\_\_ g; normal combined weight, \_\_\_\_\_ g) appear normal/other.

Endocrine System

The pituitary (\_\_\_\_\_ g; normal, \_\_\_\_\_ g) fills the sella/other. (For child: The thyroid (\_\_\_\_\_ g; normal, \_\_\_\_\_ g) is symmetrical, red-brown, and firm/other. Four/other parathyroid glands of usual size/other are identified grossly.) The adrenal glands (right, \_\_\_\_\_g; left, \_\_\_\_\_ g; normal combined weight, \_\_\_\_\_ g) are of normal size and shape/other. (For infant/child: They have uniform yellow cortices separated from the medullary gray by a thin red

line/other.)

Musculoskeletal System

Skeletal muscles are red-brown and firm/other. The cartilage and bone are firm and normal/other. The bone marrow appears red, moist and ample/pale.

Head and Central Nervous System

Reflection of the scalp reveals no evidence of subgaleal hemorrhage/other. The underlying calvarium is intact and normal in thickness/other. The dura is intact/other, and its inner surface smooth and glistening/other. The dural sinuses are patent/other. Cerebrospinal fluid is clear/other. The brain weighs \_\_\_\_\_ g. The leptomeninges are thin and transparent with no vascular congestion, subarachnoid hemorrhage, or exudate/other. The circle of Willis and other basal vasculature are intact and normally formed/other. The vessels are patent and thin-walled/other. The cranial nerves are intact and normally distributed/other. The dorsal convexities of the brain are symmetrical with a well-developed gyral pattern/other. The

brainstem and cerebellum show the usual external configuration. There is no localized external softening or contusion of the brain. There is no displacement of the cingulate gyrus, medial temporal lobe, or cerebellar tonsils/other. Multiple coronal sections of the cerebrum show an intact cortical ribbon of appropriate thickness/other. The internal architecture shows the usual pattern/other without focal lesions or hemorrhage/other. The ventricular system is of appropriate configuration and size/other. Transverse sections of the brainstem show a well-pigmented substantia nigra and locus caeruleus/other. The pons shows well-defined pyramids and inferior olivary nuclei/other. Sections of the cerebellum show prominent inferior olivary

nuclei/other; the hemispheres show the usual foliar pattern and appearance of the dentate nuclei/other. The spinal cord dura is intact/other, and its inner surface smooth and shiny/other. The spinal leptomeninges are thin and translucent/other. Anterior and posterior roots are comparable in size. Transverse sections of cord show no abnormalities/other. The

cauda equina is unremarkable/other.

Placenta

The placenta (\_\_\_\_\_ g; \_\_\_\_\_ cm average diameter; \_ cm average thickness) is intact/other. Attached centrally/eccentrically/other to the placenta is a \_ -cm segment of white/other umbilical cord averaging \_\_\_\_ cm in diameter. Sections through the cord reveal vessels. The placental membranes are thin, delicate, and translucent/other. The fetal surface is smooth and glistening/other.The maternal surface is dark red/other and consists of intact/other cotyledons. The parenchyma is dark red and spongy/other.

**AUTOPSY HISTOPATHOLOGY, PROCEDURES AND SPECIMENS REQUIRED (MATERNAL-FETAL AUTOPSY).**

Client ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Client Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of Autopsy:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time of Autopsy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Clinical Diagnosis: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Autopsy Diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Autopsy Performed by:

1. Registrar: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Consultant:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

INSTRUCTIONS

1. LABEL EACH CASSETTE WITH THE AUTOPSY NUMBER AND THE CORRESPONDING ROMAN NUMERAL AS DESCRIBED IN THIS DOCUMENT.
2. ATTACH THE AUTOPSY REPORT FOR EACH CASE TO THIS REQUEST.
3. SPECIMENS TO BE FIXED BY IMMERSION OF CASSETTES IN 10% NEUTRAL BUFFERED FORMAL SALINE
4. BRAIN SPECIMENS MUST FIRST BE FIXED IN

MATERNAL TISSUES EXCLUDING BRAIN AND SPINAL CORD: 17 CASSETTES

1. Heart, 1 section including left atrium, left circumflex coronary artery, mitral valve and left ventricle.
2. Heart, 1 section including right atrium, right coronary artery, tricuspid valve, right ventricle.
3. Left lung: hilus, and periphery.
4. Right Lung: hilus and Periphery.
5. Gastro-esophageal junction and stomach.
6. Small intestine, large intestine and appendix.
7. Liver and head of pancreas
8. Thyroid gland, tail of pancreas
9. Parathyroid glands and Pituitary gland
10. Left Adrenal Gland and Kidney
11. Right Adrenal Gland and Kidney
12. gonad, urinary bladder
13. Right breast, gonad
14. Uterus – cervix, corpus or Prostate gland/seminal vesicle
15. Muscle (cross and longitudinal sections), skin, nerve.
16. Spleen, lymph nodes
17. Vertebrae including bone marrow (to be decalcified)
18. Any other sections as required (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
19. Any other sections as required (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
20. Any other sections as required (Specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

BRAIN AND SPINAL CORD, HISTOLOGY SECTIONS 8 CASSETTES (SUBMITTED AFTER FIXATION OF THE BRAIN BY IMMERSION FOR TWO WEEKS IN 10% NEUTRAL BUFFERED FORMAL SALINE AND STANDARD BRAIN DISSECTION – REFER TO AUTOPSY STANDARD OPERATING PROCEDURE).

MATERNAL

1. Parasagital frontal lobe from anterior horn of lateral ventricle to midline apex (sampling corpus callosum, lateral ventricular wall, cingulated gyrus, indusium griseum, Parasagital neocortex and Centrum semiovale)
2. Temporal lobe including hippocampus at level of the lateral geniculate body (samples hippocampus, transitional allocortex, temporal neocortex, lateral geniculate body, temporal horn wall, choroid plexus and tail of the caudate nucleus.
3. Midline mammilary bodies through the insular cortex (samples hypothalamus, anterior thalamus, third ventricular wall, internal capsule, optic tract, globus pallidum, putamen, claustrum, insular cortex an both external and extreme capsules)
4. Midbrain (samples crux cerebri, substantia nigra, aqueduct of Sylvius, red nucleus and decussation of the brachium conjuctivum)
5. Pons at the level of fifth nerve exit (samples pontine tegmentum, floor of fourth ventricle, trapezoid body [ascending sensory pathways] pyramidal tract and cerebellar afferent nuclei and tracts)
6. Medulla Oblongata (samples pyramidal tracts, inferior olivary nuclei, medial lemniscus, various cranial nerve nuclei, medial longitudinal fasciculus, choroid plexus, floor of the fourth ventricle and inferior cerebellar peduncle)
7. Cerebellum (samples vermis and neo cerebellar cortex, white matter and dentate nucleus)
8. Spinal cord: cervical, thoracic and lumber (samples several levels of the spinal cord)
9. Any additional sections (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. Any additional sections (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.