Date of Autopsy: September 4, 2014
Case #: ME-14-1275

AUTOPSY REPORT

PATHOLOGIC EXAMINATION ON THE BODY
OF

ISABELLA NEVAH GROGAN-CANNELLA
(January 11, 2006 – September 3, 2014 at 1241 hours)

DIAGNOSES

1. Asphyxia due to strangulation.
   a. Hemorrhage in sternocleidomastoid muscle strap muscle, right.
2. Lateral tongue hemorrhage.
3. Early-moderate decomposition changes.
4. Hymen absent.
5. Non-gravid uterus.
7. Mouth filled with dirt, debris and small stones.
8. Toxicology report showing blood alcohol level of 0.035 g/100 mL consistent with postmortem decomposition.
9. Histology findings consistent with gross autopsy findings as well as:
   a. Hemorrhage within the vaginal wall.
   b. Hemangioma.

OPINION

CAUSE OF DEATH: The death of this 8 year old female, Isabella Grogan-Cannella, is due to asphyxia due to strangulation.

MANNER OF DEATH: Homicide

Rexene Worrell, MD
Forensic Pathologist
RW/Id
AUTOPSY: The autopsy is performed by Rexene Worrell, MD, Forensic Pathologist, at 1045 hours, September 4, 2014. The autopsy is performed at the Mohave County Medical Examiner’s Office. Present at the examination is Technician Robert Field.

The body is received at the Medical Examiner’s Office on September 3, 2014 at 2012 hours.

EXTERNAL EXAMINATION:

The body is received sealed in a body bag bearing seal number #06992 as well as the decedent’s name and case number. The seal is broken by Technician Field at 1045 hours on September 4, 2014. The body is wrapped in a white sheet.

The body is received clothed in a lime green tank top with small glitter hearts (Wal-Mart Basic Edition®, size 14 lg.). The tank top is pulled up to the lower chest. The breasts are not exposed. The hands are covered with brown paper bags sealed with yellow tape. No other personal items are received with the body.

The body is that of a White female child weighing approximately 85 pounds, measuring 4 feet 7 inches and appearing the stated age of 8 years.

The refrigerated body is cold to touch. There is no evidence of rigor mortis. Postmortem lividity is present over the posterior aspects of the body. The body is in an early to moderate state of decomposition with discoloration and skin slippage. Sand is present over the entire body. Over the face there is a thickened layer of caked on sand admixed with decomposition fluid oozing from her nose.

The hair is long (14 inches) and sandy blonde in color. The hair is matted over the cheeks within the decomposition fluid and sand. The eyes are closed. The color of the irides are not discernible due to decomposition. The conjunctivae show no petechial hemorrhage or congestion. The skeleton of the nose is intact. The earlobes are unremarkable. The decomposition fluid from the nose has run into the ear canals. The lips are enlarged from early decomposition changes. The mouth is slightly open. The tip of the tongue is clinched between the teeth. The mouth is filled with sand and debris. Multiple small stones are present in the mouth admixed with the sand. The teeth are natural and in good repair. There is diastema of the central upper incisors. The lower frenula is torn; however, this is a post mortem injury. There are no other oral mucosal lesions.
The trachea is midline. The skin of the neck is intact. There are no palpable cervical masses. The cervical spine is freely movable. Over the head and neck, there is dark discoloration and skin slippage.

The chest is symmetric. The breasts are unremarkable. On the right and left upper chest, there are linear areas of pink discoloration corresponding to the folds in the tank top. In the mid chest there is dark discoloration. The abdomen is slightly enlarged. Focal areas of skin slippage is present over the abdomen. The lateral abdomen and flank areas show marbling and skin slippage. The external genitalia are that of a normal female child. The entire groin area is caked with sand. No evidence of trauma is noted about the external genitalia.

Over the back there is dark discoloration and skin slippage with sparing in a V-shaped pattern from the shoulders to the mid back. The buttocks is covered with a thin layer of sand and is otherwise without special note.

The upper extremities are symmetric. Over the shoulders, there is discoloration, marbling, bullae formation and skin slippage. Over the arms there are focal areas of skin slippage. There is no significant clubbing, edema or deformity. The fingernails are short and dirty. The fingers of the right hand show washerwoman changes to the 3rd-5th fingers. The left hand shows similar changes on the lateral aspects of the 2nd -5th fingers. The fingernails show remnants of lime green polish. There is no external trauma noted to the hands.

The lower extremities are symmetric. Scant hair is present over the lower extremities. There is no edema or deformity noted. Over the back of the right leg, there is an L-shaped area consistent with postmortem ant bites. Over the lower extremities, there are multiple round lesions in various stages of healing consistent with bug bites (probable common bed bugs). About the left ankle, there is a Medical Examiner's identification band bearing the decedent's case number. The soles of the feet are clean. On the top of the left foot there is an area of skin slippage. The toes of the left foot show early drying artifact. The toenails are long, clean and cracked with remnants of green polish.

**EVIDENCE OF MEDICAL TREATMENT:**

1. There is no evidence of medical treatment.

**EVIDENCE OF EXTERNAL INJURY:**

1. On the left knee, there is a superficial abrasion, 2.3 x 0.3 inches.

2. On the medial aspect of the left knee, there is a superficial abrasion, 2.1 x 1.0 inches.
3. Over the left lower extremity, there are multiple superficial linear scratch abrasions, covering an area overall 5.9 x 3.0 inches.

4. On the instep of the left foot, there is a contusion.

INTERNAL EXAMINATION:

BODY CAVITIES: The body is entered by a Y-shaped thoraco-abdominal incision. The head is entered by an intermastoid incision. The adipose tissue is bright yellow and the cut surface is unremarkable. The ribs and soft tissues of the chest are without special note. There are no masses, fractures or hemorrhages. All the organs are present in their usual anatomic positions and maintain their usual anatomic relationships. The expected amount of serous fluid is present in pericardial, pleural and peritoneal cavitities. The peritoneal surface is smooth, glistening and without adhesions. There are no abnormal fluid collections or unusual color changes. The retroperitoneum does not contain hemorrhage or masses.

NECK ORGANS: As previously stated there is sand and rocks in the mouth. The tongue is covered with sand and shows no external injury. On cut section there is a small amount of hemorrhage to the lateral border of the tongue. The epiglottis is not enlarged.

The left sternocleidomastoid shows a small amount of hemorrhage over the anterior medial area. The suprahyoid and infrahyoid muscles of the neck show no other evidence of antemortem hemorrhage. The hyoid bone is intact. The synchronoses of the hyoid bone are fused and intact. The greater horns of the hyoid bone show no hemorrhage or fracture.

The thyroid cartilage is dissected. The superior horns show no evidence of fracture or hemorrhage.

The cricoid cartilage is intact and without areas of hemorrhage. The cricothyroid membrane shows no evidence of hemorrhage.

RESPIRATORY SYSTEM: The right lung weighs 275 grams. The left lung weighs 245 grams. The pleural surfaces are translucent, glistening and smooth. The laryngeal mucosa is tan and smooth. The trachea and bronchi are pink tan. A foamy fluid lines the trachea and bronchi. There are no foreign objects in the airways. The lungs are pink anteriorly and dark blue in the posterior dependent portions.

On cut section, the pulmonary parenchyma displays minimal congestion and edema. The lungs are well aerated. No tumor masses or lesions are identified. The pulmonary arteries are patent. There are no thromboemboli in the pulmonary arteries. The perihilar lymph nodes are not noticeably enlarged. Anthracotic pigment is not identified.
CARDIOVASCULAR SYSTEM: The heart weighs 120 grams. The heart occupies its usual mediastinal site with the left ventricle lying anterior. The aorta is normally developed and gives rise to the expected vessels. The venae cavae are unremarkable. The pericardial sac lining is smooth and glistening. The epicardial surface is smooth and unremarkable. The coronary arteries pursue their usual anatomic course with right coronary artery predominance. The coronary arteries show no atherosclerotic changes.

On opening the heart, the valves of the heart and great vessels are without special note. The valve leaflets are thin, delicate and freely moveable and without vegetations. The chordae tendinae are not shortened or fused. The papillary muscles are unremarkable. The chambers of the heart are the expected size and shape. There are no abnormal communications between the heart chambers. The atrial appendages are free of thrombi. The coronary ostia are patent.

On cut section, the myocardium shows no significant pathological change. The left ventricular wall measures 0.8 centimeters; the right ventricular wall measures 0.3 centimeters.

The proximal and distal aorta is the expected caliber with all major arterial branches arising in their normal location. The aorta is without significant curvature. The lumen shows no atherosclerotic changes. There are no occlusions of the major arterial branches.

HEPATOBILIARY SYSTEM: The liver weighs 455 grams and has the normal lobulations. The liver is red-brown with smooth surface and sharp margins. On cut section, the hepatic parenchyma is red-brown. The parenchyma is the expected consistency and shows no evidence of fibrosis or cirrhosis. There are no masses, lesions, or hemorrhages present. The portal vein is free of thrombi. The hepatic artery and veins are patent.

The gallbladder contains 2 cc of dark yellow bile. The mucosa shows the expected thin velvety surface. No stones are noted within the lumen. The cystic duct, extrahepatic duct and intrahepatic ducts are patent and without stones.

HEMOLYMPHATIC SYSTEM: The spleen weighs 50 grams. The spleen occupies its usual anatomic site. The spleen is gray with a smooth capsule. No lesions are noted over the surface. On cut section, the splenic parenchyma is dark red and soft and falls apart easily with handling. No accessory spleens are found. The splenic artery is patent and the splenic vein is free of thrombus. No lymphadenopathy is noted.

GASTROINTESTINAL SYSTEM: The esophagus transverses the posterior mediastinum and enters the stomach through an intact diaphragm. The esophageal mucosa is pink white and without special note. The gastric esophageal junction is easily defined and shows no significant lesions.
The stomach contains approximately 150 mL of thick partially digested food stuff with small amount of undigested potato. The gastric mucosa shows flatten rugal folds with prominent vascular markings. The mucosa shows irregular areas of congestion. There are no areas of ulceration, erosion, or hemorrhage of the mucosal surface. The pylorus is patent.

The duodenum, small and large intestine are without special note. Liquid stool is present throughout the entire intestinal system. The mesenteric arteries are patent and the veins are free of thrombi. The vermiform appendix is present and unremarkable.

**GENITOURINARY SYSTEM:** The right kidney weighs 55 grams. The left kidney weighs 60 grams. The kidneys are the expected size and shape. Both kidneys are red brown with a smooth surface. The capsules strip with ease. On cut section, the kidneys are red brown. The cortex is the normal thickness. The renal pyramids are without special note. The corticomedullary junction is sharply demarcated. There are no lesions identified. The renal pelvis, calices, ureters and urinary bladder are without special note. The urinary bladder contains 15 cc of cloudy, thick, yellow urine.

The uterus, Fallopian tubes and ovaries have a combined weight of 55 grams. The tubes and ovaries are without special note. On opening the uterus, the endometrial lining is unremarkable. The uterus is non-gravid.

**ENDOCRINE SYSTEM:** The adrenals are autolysed and otherwise unremarkable.

The pancreas is yellow tan and on cut section has the expected pink-tan, firm, lobulated surface. Fat necrosis is not grossly evident. The pancreatic duct is patent with no stones. No lesions or hemorrhage is identified.

The pituitary gland is the expected size and shape and is without special note.

The thyroid gland is the normal size and texture. On cut section, the thyroid parenchyma is the normal beefy red consistency. No nodules or lesions are noted.

**MUSCULOSKELETAL SYSTEM:** The musculature of the body is normally developed for the decedent's age and is otherwise without special note. The extremities are symmetric. The axial skeleton system is intact to total body palpation. No deformities or malformations are noted.

**CENTRAL NERVOUS SYSTEM:** The scalp displays no laceration or hematomas. On reflecting the scalp, there is no subgaleal hemorrhage. The skull is of average thickness. The skull is intact. No osteolytic lesions are identified. There are no fractures of the basal skull.
On entering the cranial cavity, there is no evidence of hemorrhage; specifically, there are no subdural or epidural hematomas. The leptomeninges are without special note. The brain weighs 1125 grams. There is no flattening of the gyri or widening of the sulci. There is no evidence of herniation or either diffuse or localized swelling. The cranial nerves are paired and symmetrical. The brain is soft from decomposition changes.

Multiple coronal sections of the cerebrum, cerebellum and brain stem show no gross hemorrhages or space occupying lesions. Serial sections of the brain show no significant pathologic change. The basal ganglia are grossly normal. The ventricular system is symmetrical, non-dilated and filled with a clear fluid. The choroid plexus are unremarkable. Fluid blood is noted in the dural sinuses. The vessels at the base of the brain are without special note. The pituitary gland is unremarkable. Internal palpation of the neck is without hypermobility or dislocation.

**DISPOSITION OF EVIDENCE:**

1. Samples of blood are retained for toxicology.
2. Tissue sections are retained for histology.
3. A DNA card is retained for identification.
4. Digital images are retained for documentation.
5. Fingerprints are retained for documentation.
6. Evidentiary items are released to the Bullhead City Police Department as follows:
   a. Two (2) yellow envelopes with right and left hand fingernail clippings.
   b. Brown bag containing shirt.
   c. Brown bag containing evidence bags on hands.
   d. Sexual assault kit.
   e. Brown bag containing white sheet with debris.
SUMMARY OF CASSETTES:

1. Lung
2. Lung
3. Heart
4. Liver
5. Right parietal scalp
6. Vaginal area
7. Right SCM
8. Subgaleal
9. Subgaleal
10. Brain
11. Tongue
12. Tongue
13. Rectum
14. Rectum
15. Rectum
16. Vagina
17. Vagina
18. Vagina