

# City of Philadelphia Office of the Medical Examiner

321 University Avenue Philadelphia, PA 19104

Case Number

: 11-00420

Date of Death

: Jan 26 2011

### FINDINGS AND OPINIONS

DECEDENT'S NAME ELLEN R. GREENBERG	AGE 27 Years	White	sex Female	HEIGHT 5 ft 7 in	WEIGHT 136 Ib
PRONOUNCED DEAD BY Medic-5	AT 4601 Flat Rock Rd. Unit 603 Philadelphia PA			Jan 26 201	11 6:40PM
ID WITNESS NAME Joshua Greenberg	ADDRESS			RELATION Father	

## Findings:

The decedent is a 27-year-old female with a history of anxiety. Per the police investigation the decedents' live in fiancé returned home from the gym to find door locked and the security latch on the door. He made several attempts to contact the decedent by yelling into the apartment, sending her a series of text messages, sending her an E-mail, and calling her phone. The fiancé ultimately broke into the apartment and found her dead in the kitchen.

- Multiple stab wounds to the chest, abdomen, and back of neck. A knife (12.5 centimeter blade) is present in one of the chest wound (at a depth of 10 centimeter). There is an incised wound to right occipital scalp
  - o The wounds are associated injuries to the aortic arch, the upper lobe of the left lung, liver, and the cervical spinal cord at C2-C3 level dorsally.
  - The spinal cord injury was evaluated grossly by neuropathology. It was concluded that the injury to the spinal cord would not have incapacitated the decent. Therefore the decent would be able to inflict the subsequent stab wounds to her body.
  - o There are bilateral hemothoraces, a hemopericardium, a small collection of subarachnoid blood over the vermis and the base of the right cerebellar hemisphere. There are no gross defects to the parenchyma of the cerebellum or brainstem.
- · Multiple contusions are on upper and lower extremities in various stages of resolution
- DNA analysis of blood stains on the knife and the decedent clothing only match her DNA
- · Analysis of the decedent's laptop provided no additional information

Cause of Death:

Multiple Stab Wounds

Other Significant Conditions:

Manner of Death:

Suicide

Marlon Osbourne, M.D. Assistant Medical Examiner



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#### REPORT OF EXAMINATION

DECEDENT'S NAME

ELLEN R. GREENBERG

An autopsy was performed on the body of the decedent at the Philadelphia Medical Examiner's Office on January 27, 2011. The external examination was started at approximately 9AM. The internal examination was started at approximately 11AM.

Clothing: The clothing that accompanies the decedent consists of grey/purple hooded sweatshirt, grey sweat pants, and brown boots.

#### **EXTERNAL EXAMINATION:**

The body is that of a 5 foot 7 inch, 136 pound, white female who appears compatible with reported age of 27 years. The atraumatic scalp is covered by brown hair. The facial bones have no palpable fractures. The irides are brown. The sclerae are white. The conjunctivae have no petechiae. The external auditory meatuses have no discharge. The nares are patent. The nasal bones and nasal septum are intact. The lips are atraumatic. The oral cavity has no injuries. The tongue has no injuries. The teeth are natural and in good repair. The neck is symmetric. The chest is symmetric. The abdomen is flat. The body habitus is mesomorphic. The back is symmetric. The upper and lower extremities have no deformities or fractures. The external genitalia are those of an adult female. The anus and perineum have no trauma or abnormalities.

#### STAB WOUND "A" OF CHEST:

An elliptical, horizontally oriented  $0.4 \times 0.2$  centimeter stab wound is centered 30 centimeters below the top of the head in the midline of the chest. The medial end of the wound is sharp. The lateral end is blunt. The edges of the wound are smooth. The wound is approximately 0.4 centimeters when reapproximated. The wound extends through the skin of the chest for a depth of 0.2 centimeters.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the chest

The pathway of the wound with the body in the normal anatomic position is front to back.

#### STAB WOUND "B" OF CHEST:

An elliptical, horizontally oriented 0.3 x 0.1 centimeter stab wound is centered 31 centimeters below the top of the head in the midline of the chest. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.3 centimeters when reapproximated. The wound extends through the skin of the chest for a depth of 0.2 centimeters.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the chest

The pathway of the wound with the body in the normal anatomic position is front to back.

#### STAB WOUND "C" OF CHEST:

An elliptical, obliquely oriented 2 x 0.6 centimeter stab wound is centered 29 centimeters below the top of the head, and 4.5 centimeters to the right of midline. The sharp end is in the 5 o'clock position. The blunt end is in the 10 o'clock position. The edges of the wound are smooth. The wound is approximately 1.7 centimeters when reapproximated. The wound extends through the skin and muscles of the right side of the chest and the right clavicle for a depth of 1.4 centimeters.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the right side of the chest and beneath the right clavicle.

The pathway of the wound with the body in the normal anatomic position is slightly right to left, front to back and slightly upward.

#### STAB WOUND "D" OF CHEST:

An elliptical, horizontally oriented 0.3 x 0.1 centimeter stab wound is centered 33 centimeters below the top of the head and 2.7 to the right of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.3 centimeters when reapproximated. The wound extends through the skin of the chest for a depth of 0.2 centimeters.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the chest

The pathway of the wound with the body in the normal anatomic position is front to back.

#### STAB WOUND "E" OF CHEST:

An elliptical, horizontally oriented  $1.7 \times 0.5$  centimeter stab wound is centered 33 centimeters below the top of the head, and 2.5 centimeters to the left of midline. The sharp end is in the 3 o'clock position. The blunt end is in the 9 o'clock position. The edges of the wound are smooth. The wound is approximately 1.6 centimeters when reapproximated. The wound extends for a depth of 10 centimeters through the skin and muscles of the left side of the chest, the left second intercostal space, into the superior mediastinum.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the left side of the chest, creates a 2.4 centimeter incised defect to the aortic arch, and a incises the upper lobe of the left lung. The pericardial sac contains 120 milliliters of liquid and clotted blood. The left pleural cavity contains 500 milliliters of liquid blood.

The pathway of the wound with the body in the normal anatomic position is left to right, front to back and slightly downward.

#### STAB WOUND "F" OF CHEST:

An elliptical, vertically oriented  $0.6 \times 0.2$  centimeter stab wound is centered 34.5 centimeters below the top of the head and 0.8 to the left of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.5 centimeters when reapproximated. The wound extends through the skin of the chest for a depth of 0.2 centimeters.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the chest

The pathway of the wound with the body in the normal anatomic position is front to back.

#### STAB WOUND "G" OF CHEST:

An elliptical, vertically oriented  $0.6 \times 0.2$  centimeter stab wound is centered 34.5 centimeters below the top of the head in the midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.5 centimeters when reapproximated. The wound extends through the skin of the chest for a depth of 0.2 centimeters.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the chest

The pathway of the wound with the body in the normal anatomic position is front to back.

#### STAB WOUND "H" OF CHEST:

An elliptical, vertically oriented 1.5 x 0.5 centimeter stab wound is centered 42 centimeters below the top of the head in the midline. The sharp end is in the 6 o'clock position. The blunt end is in the 12 o'clock position. The edges of the wound are smooth. The wound is approximately 1.5 centimeters when reapproximated. The wound extends for a depth of 4 centimeters through the skin and muscles chest, through the right sixth intercostal space, and 2.3 centimeter into the liver.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the right side of the chest a 2.3

centimeter deep liver defect, and intraabdominal blood.

The pathway of the wound with the body in the normal anatomic position is slightly left to right, front to back.

#### STAB WOUND "I" OF ABDOMEN:

An elliptical, vertically oriented 2 x 0.8 centimeter stab wound is centered 46 centimeters below the top of the head in the midline. The sharp end is in the 6 o'clock position. The blunt end is in the 12 o'clock position. The edges of the wound are smooth. The wound is approximately 1.9 centimeters when reapproximated. The wound extends for a depth of 6 centimeters through the skin and muscles of the abdominal wall.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the abdominal, intramesentric hemorrhage and intraabdominal blood.

The pathway of the wound with the body in the normal anatomic position is slightly left to right, front to back.

#### INCISED WOUND "J" OF SCALP:

An obliquely oriented 6.5 x 1.1 centimeter wound is centered 8 centimeters above the right external auditory meatus, and 6 centimeters to the right of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 6.5 centimeters when reapproximated. The wound extends through the skin and the scalp.

#### STAB WOUND "K" OF NECK:

An elliptical, vertically oriented 2 x 0.2 centimeter stab wound is centered 9 centimeters below the top of the head, and 2 centimeters to the left of midline. A 1 x 0.2 centimeter serrated abrasion is associated with the wound. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 1 centimeter when reapproximated. The 0.3 centimeter deep wound extends through the skin of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is slightly left to right, back to front.

#### STAB WOUND "L" OF NECK:

An elliptical, vertically oriented 1.1 x 0.6 centimeter stab wound is centered 14 centimeters below the top of the head, and 4 centimeters to the left of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 1.1 centimeter when reapproximated. The 0.2 centimeter deep wound extends through the skin of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is slightly left to right back to front.

#### STAB WOUND "M" OF NECK:

An elliptical, vertically oriented 0.2 x 0.1 centimeter stab wound is centered 11 centimeters below the top of the head in the midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.2 centimeter when reapproximated. The 0.3 centimeter deep wound extends through the skin of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is back to front.

#### STAB WOUND "N" OF NECK:

An elliptical, vertically oriented 1.1 x 0.4 centimeter stab wound is centered 13 centimeters below the top of the head, and 0.5 centimeters to the left of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 1.2 centimeter when reapproximated. The 8 centimeter deep wound extends through the skin and muscles of the posterior neck through the occipital triangle and into the ligamentum nuchae.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the posterior neck, a defect in the ligamentum nuchae, incises small vessels overlying the cerebellum, creating a subarachnoid hemorrhage over the vermis, the caudal aspect of the right cerebellar hemisphere.

The pathway of the wound with the body in the normal anatomic position is left to right, back to front and upward.

#### STAB WOUND "O" OF NECK:

An elliptical, horizontally oriented 1.2 x 0.6 centimeter stab wound is centered 14 centimeters below the top of the head, and 6.8 centimeters below the right external auditory meatus. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 1.4 centimeter when reapproximated. The 3 centimeter deep wound extends through the skin and muscles of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is right to left, back to front.

#### STAB WOUND "P" OF NECK:

An elliptical, vertically oriented 1 x 0.3 centimeter stab wound is centered 13.5 centimeters below the top of the head, and 2 rentimeters to the right of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 1 centimeter when reapproximated. The 2.1 centimeter deep wound extends through the skin and muscles of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is right to left, back to front.

#### STAB WOUND "Q" OF NECK:

An elliptical, vertically oriented 0.6 x 0.3 centimeter stab wound is centered 15 centimeters below the top of the head, and 3 centimeters to the left of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.6 centimeters when reapproximated. The 2 centimeter deep wound extends through the skin and muscles of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is slightly left to right, back to front.

#### STAB WOUND "R" OF NECK:

An elliptical, vertically oriented 0.9 x 0.6 centimeter stab wound is centered 16 centimeters below the top of the head, and 3 centimeters to the left of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.9centimeters when reapproximated. The 1.9 centimeter deep wound extends through the skin and muscles of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is slightly left to right, back to front.

#### STAB WOUND "S" OF NECK:

An elliptical, vertically oriented 0.5 x 0.1 centimeter stab wound is centered 16.5 centimeters below the top of the head, and 1.1 centimeters to the left of midline. The ends of the wound are sharp. The edges of the wound are smooth. The wound is approximately 0.5 centimeters when reapproximated. The 2.1 centimeter deep wound extends through the skin and muscles of the posterior neck.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the posterior neck.

The pathway of the wound with the body in the normal anatomic position is slightly left to right, back to front.

#### STAB WOUND "T" OF NECK:

An elliptical, horizontally oriented  $1.5 \times 0.3$  centimeter stab wound is centered 16.5 centimeters below the top of the head, and 4.5 centimeters to the right of midline. The medial end of the wound is sharp. The lateral end is blunt. The edges of the wound are smooth. The wound is approximately 1.5 centimeters when reapproximated. The 7 centimeter deep wound extends through the skin, and muscles of the back, between the second and third cervical vertebra laterally, and incises the dura covering the subjacent spinal cord.

Associated with the wound track are hemorrhages in the adjacent soft tissues and muscles of the left side of the back, a defect of the dura and focal epidural hemorrhage. Grossly there is bulging of the cervical cord subjacent to the dural defect.

Note: Neuropathologist Dr. Lucy Rouke examined the spinal cord and concluded that there is no defect of the spinal cord.

The pathway of the wound with the body in the normal anatomic position is right to left, back to front.

#### OTHER INJURIES:

The right upper arm has a round 3 x 4 centimeter contusion. The right forearm has a 3 x 1.5 centimeter area of three round contusions. The right lower quadrant of the abdomen has a 3 x 3.5 centimeter contusion. The right thigh has vertical row of round contusions that are a  $2.5 \times 3$  centimeter,  $4.5 \times 3$  centimeter, and  $5 \times 6$  centimeters. Above the right knee is a  $4.5 \times 3$  centimeter area of three round contusions.

#### INTERNAL EXAMINATION:

The firm, brown, muscles of the anterior neck, have no hemorrhage or injuries. The adjacent connective tissue and vessels of the anterior aspect of the cervical spine are unremarkable. The clavicles, sternum, and pelvic bones have no fractures. The hyoid bone and thyroid cartilage are intact. The peritoneal cavity has no adhesions. The intrathoracic and intraabdominal organs are in their normal positions.

The smooth epicardium has a normal amount of subepicardial adipose tissue in a normal distribution. The heart is 230 grams. The right coronary artery supplies the posterior interventricular septum. The coronary arteries have no atherosclerosis. The chambers of the heart contain no mural thrombi. The atrioventricular and semilunar valves are normally formed and have no calcifications, nodularity, or vegetations. The coronary arteries arise normally from the sinuses of Valsalva. The firm, red-brown, homogenous myocardium has no areas of fibrosis or necrosis. Injuries to the aorta are as previously described. The aorta arises from its usual position, has a normal branching pattern and no atherosclerosis. The pulmonary arteries have no thromboemboli.

The larynx and trachea have no foreign objects or mucous plugs. The right and left lungs are 220 grams and 200 grams, respectively. Injuries to the right lung are as previously described. The smooth pink-tan to purple visceral pleural surfaces have mild anthracosis. The red-maroon and congested lung parenchyma has no areas of consolidation, granulomata or masses. The tracheobronchial tree has no mucous plugs or foreign objects.

The esophagus has a white-tan, longitudinally folded mucosa and no varices. The empty stomach has a pink smooth serosa. The tan gastric mucosa has rugal folds and no erosions or ulcers. The small and large intestines have tan, smooth serosa and no perforation, obstruction, masses or ischemic injuries. The appendix is normal. The rectum is filled with green stool.

The 1160 gram liver has an intact capsule, red-brown congested parenchyma and no masses or cysts. The gallbladder is empty. The tan, lobulated pancreas has no masses or cysts.

The 100 gram spleen has a lavender intact capsule, red-maroon parenchyma and inconspicuous Malpighian corpuscles. The paraaortic, paratracheal, and mediastinal lymph nodes are inconspicuous.

The right and left kidneys are 110 grams and 140 grams, respectively. The cortical surfaces are smooth. The renal parenchyma has pale cortices and distinct and prominent medullary pyramids. The calyces and pelves are not dilated and have no masses or calculi. The ureters are unobstructed and normal in course and caliber to the urinary bladder. The urinary bladder contains 100 milliliters of yellow urine.

The vagina has a smooth mucosa and no lesions. The cervix is normal. The uterus has a normal shape and normal myometrial thickness. The endometrium is smooth and has no lesions. The ovaries are normal. The fallopian tubes have normal caliber.

The brown, bilobed thyroid gland has no masses or cysts. The parathyroid glands are inconspicuous. The adrenal glands have thin yellow cortices and brown medullae.

The reflected scalp has no subgaleal hemorrhages. The calvarium and skull base are intact. The epidural and subdural spaces have no liquid accumulations. A small amount of subarachnoid blood covers the rostral surface of the vermis, right cerebellar hemisphere, and the basal cisterns. No gross parenchymal defects are identified in theses areas. The leptomeninges are thin and translucent. The brain is 1440 grams. The cerebral hemispheres are symmetric. The corpus callosum is intact. The basilar artery, its tributaries and branches have no atherosclerosis or aneurysms. The cingulate gyri, unci and cerebellar tonsils are not herniated.

Marlon Osbourne, M.D. Assistant Medical Examiner

(End of Report)



# Toxicology Report

City of Philadelphia
Office of the Medical Examiner

CASE NO. 11-00420

Name: ELLEN R. GREENBERG

Race White

Age: 27 Years Sex: Female

Pathologist: Marlon Osbourne

#### ELISA - Enzyme Immunoassay

BENZODIAZEPINES

Blood, Cardiac (F)

Negative

**FENTANYL** 

Blood, Cardiac (F)

Negative

**OPIATES** 

Blood, Cardiac (F)

Negative

**OPIATES** 

Urine

Negative

#### Wet Chemical Tests - Colorimetry

**VOLATILES** 

Blood, Cardiac (F)

Negative

#### Drug Screen - SPE, GC/MSD

ZOLPIDEM

Urine

Trace

ZOLPIDEM

Blood, Cardiac (F)

Trace

#### Benzodiazepine Confirmation/Quantitation - SPE, GC/MSD

CLONAZEPAM

Blood, Cardiac (F)

Present

<7.5 μg/L

#### Analysis Notes

Volatiles analysis is a colorimetric method that screens for low molecular weight organic volatile reducing agents such as ethanol, methanol, isopropanol, acetaldehyde, and formaldehyde.

Drug Screen by GC/MSD includes screening for the following drug(s) and class of drugs: anticonvulsants, antidepressants, antihistamines, anticholinergics, barbiturates, muscle relaxants and non-steriodal anti-inflammatory agents (excluding salicylates), non-benzodiazepine sedative-hypnotics. Detection of specific compounds of each class is concentration dependent and not all drugs of each class are detected. Certain compounds outside of these classes are also detected. Common incidental findings such as caffeine and metabolites or nicotine and metabolites are not reported.

Benzodiazepine Confirmation/Quantitation is a GC/MSD screen/quantitation for: diazepam, nordiazepam, oxazepam, temazepam, alprazolam, triazolam, estazolam, midazolam, lorazepam, clonazepam, 7-aminoclonazepam.

Enzyme immunoassay testing results are preliminary. Any positive results must be confirmed by another technique.

Toxicologist:

Lisa A. Mundy

Date:

2/8/2011