Introduction

In the human gross anatomy course, the primary teaching and learning tool is the human cadaver. Often, the cadaver is introduced as the medical student’s first patient. Because the cadaver was at one time a living, breathing human being, the cadaver was in fact a real patient at some point in time. For some reason, often unknown to the student, the patient passed away and his or her body was sent to the University of Utah’s Body Donor Program per the patient’s wishes. As a student, the only information you receive about the cause of death of the cadaver you are dissecting comes from the death certificate. Keep in mind, however, that the cause of death listed on the death certificate is often listed as the immediate cause of death. However, the immediate cause of death may have been preceded by some other long-term disease process(es). As you dissect the cadaver, you may discover pathology or variations from normal anatomy that may or may not have contributed to the death of the individual. You will use these discoveries to compose an autopsy report for your cadaver. A benefit of this exercise is integration of coursework within the medical curriculum. In addition, this exercise will assist you in developing an understanding about normal and pathological structure and function of the human body.

The cadaver autopsy report is modeled after a typical autopsy report from a hospital pathologist or coroner’s office. A pathologist who performs an autopsy will usually be privy to the medical record of the individual and this can be of great assistance in guiding the pathologist in his or her exploration of the body. You, however, do not have that information, nor do you likely have experience in human pathology. Thus, your cadaver autopsy report will be limited in scope. To assist you in this endeavor, pathology faculty and residents will come to the gross anatomy laboratory during particular laboratory sessions (such as when the thoracic and abdominal cavities are opened) and assist you in finding pathologies in the cadaver. They will also take tissue samples from the cadaver and prepare histology slides of those samples for you to analyze in the histology course. As you perform your dissections, you will take notes regarding abnormal or pathological conditions in an Anatomic Pathology Notes packet that will be handed out to each dissection group. At the end of the course, each student will compose a written Cadaver Autopsy Report that summarizes his or her findings (and interpretations) from the cadaver. In addition, you will provide a suspected cause of death (based on your observations) for your cadaver in your written report.
A. OVERVIEW AND COMPONENTS OF THE PROJECT

Grading and Evaluation
This project will comprise 5% of your overall grade in Anatomy 6010. There are two components to the exercise that you will be graded on:

1. Cadaver Autopsy Notes – 1 completed packet per group.
2. Cadaver Autopsy Report – 1 written report per individual.

1. Cadaver Autopsy Notes
Each dissection group will receive an Anatomic Pathology Notes packet at the beginning of the course. As you perform your dissections on the cadaver, you will enter pertinent observations of normal and/or pathologic anatomy that you observe in your cadaver. We recommend having one notebook at each table throughout the term. At the end (or during) each dissection period, read through the appropriate section of the notes packet and answer the questions related to you cadaver’s anatomy/pathology. You must be diligent and record your notes after every dissection period. The activity cannot be done accurately in a single day at, or near, the end of the term because much of the pathology you notice early on will be removed and/or destroyed by subsequent dissection of your cadaver.

2. Cadaver Autopsy Report
Each student will turn in an original written Cadaver Autopsy Report based on observations made on the cadaver and the anatomic pathology notes taken by the dissection group. An example of an autopsy report has been posted to the web site to help you compose your report. In addition, a template for your report (in Microsoft Word™ format)is posted to the web site for you to download.

You must submit both paper and electronic versions of your report. Deliver the paper version of your report to Christine Eckel or David Morton in person, or to Mary Bouck in the Dean’s office on the day it is due. Also E-mail an electronic copy of your report to Christine (christine@neuro.utah.edu or christine.eckel@utah.edu).

Due Date: FRIDAY, DECEMBER 1, 2006 (no later than 4:00 pm).

Required Formatting:
- The report must be typed.
- The report must contain no more than two pages of single-spaced text.
- The pages must be one-sided.
- The page margins must be 1-inch.
- The smallest acceptable font size is 12 point.

B. INSTRUCTIONS FOR THE CADAVER AUTOPSY REPORT

Each cadaver autopsy report will have two sections. You will organize Section I according to the directions below so that all reports include the same general information about the cadavers. The same general information text may be written by the group and copied by every student who worked on a particular cadaver. However, each student must write an original report summarizing the anatomic pathologies (Section II). You have two choices concerning how you organize Section II of your report. Directions and suggestions are listed on the next page.
SECTION I – GENERAL INFORMATION (Shared text by each student per cadaver)
A. Technical Information
   1. Table number
   2. Cadaver number
   3. Cause of death: State your hypothesis regarding the cause of death.
B. Body habitus
C. Observations of surface anatomy

SECTION II – ANATOMIC PATHOLOGY SUMMARY (Original text by each student per cadaver)
We recognize that you are not experienced with anatomic pathology and its technical terms, some of which are defined in the Anatomic Pathology Notes booklet that you used in the laboratory. Therefore, we would like you to describe, in plain language, the appearance of the region or organ system you are writing about, and to describe how that appearance was different from normal anatomy. If the region or organ system you are writing about has no abnormality, please describe the normal anatomy for that region or organ system.

You may organize your report based on one of the following options:

A. Summary of regional anatomic pathology with integrated histopathology. Each group member will choose one anatomic pathology finding for the cadaver and describe the finding. The description should include where the pathology is located, the type of pathology, and the size of the pathology. Compare the regional pathology to normal anatomy for the same region. Repeat those descriptions for the tissue slides, as guided below.

This may be a good choice if you found multiple abnormalities involving several organ systems in your cadaver (e.g. metastatic tumors located in multiple organ systems). If you choose this approach, have each member of your dissecting group write about a different finding (e.g. student “A” describes lung anatomy and tumors in lung; student “B” describes liver anatomy and tumors in liver; both reports reference the common origin of the tumors). If you choose this approach, all of the reports will collectively provide a summary of your group’s findings.

B. Summary of organ system pathology with integrated histopathology. Each group member will choose one organ system and describe the abnormal and normal anatomy of the organ system. Compare the organ system pathology to normal anatomy for the same system. Repeat those descriptions for the tissue slides, as guided below.

This may be a more interesting, informative, or practical approach if your cadaver died as a result of a disease that predominantly affected one organ system (e.g. cardiovascular disease). For some cadavers, only one organ system may be affected. Nonetheless, each group member should write his or her own report (do not copy each other’s reports). If more than one organ system is affected, each group member may write about a different organ system.

Guidance for the histopathology section of the Cadaver Autopsy Report.
You may copy and paste the histology report that you submitted to Dr. Ash. However, we expect you to expand that report by relating the histopathology to the anatomic pathology for your cadaver.

We understand that you are not experienced with histopathology. Therefore, we would like you to describe, in plain language, how the tissue samples you obtained from your cadaver differ histologically from normal (if at all). For example, in a slide prepared from a tissue sample taken from a healthy heart ventricle, the cardiac muscle cells should have one to two centrally located nuclei. In contrast, a slide prepared from a tissue sample taken from a pathologic region of the heart, where the gross observations showed a cardiac infarct, the histopathology might show cardiac muscle cells devoid of nuclei. Your report does not have to state the cause of the abnormality. Rather, state your observations. Given this example, you might state, “Cardiac muscle cells appear to be the normal size and shape, but they are devoid of nuclei.” Once again, remember that you will be revisiting this summary in the pathology course next term so a thorough summary of your current observations will be beneficial to you in the future.