CADAVER AUTOPSY REPORT  
ANATOMY 6010 – GROSS ANATOMY  

Submitted By: Anna Tommei  
Student ID: 00142974  
Class (circle/bold one)  
Dental  Grad  Med

SECTION I – GENERAL INFORMATION

A. Technical Information

<table>
<thead>
<tr>
<th>Table Number</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadaver Number</td>
<td>6</td>
</tr>
<tr>
<td>Age of Cadaver</td>
<td>Between 50 and 70 -- estimate</td>
</tr>
<tr>
<td>Sex of Cadaver</td>
<td>Female</td>
</tr>
<tr>
<td>SUSPECTED Cause of Death</td>
<td>Myocardial Infarction</td>
</tr>
</tbody>
</table>

B. Body habitus

The body habitus was normal with a moderate but normal amount of body fat.

C. Observations of surface anatomy

Generally, the skin appeared normal with no significant markings except a 2x5mm vertical scar on the anterior midline of the neck approximately 4mm above the suprasternal notch. The face, ears, and nose were unremarkable with arcus cornealis in the eyes. The neck showed the scar already mentioned with otherwise normal anatomy. The breasts and back presented with normal appearance. The upper and lower limbs showed slight muscle wasting. The mouth demonstrated possible interproximal carious lesions. Bruxism was evidenced by wear facets present on the incisal surfaces of the anterior teeth. Also, gingival recession ranging from 1-3mm was present on several teeth.

SECTION II – ANATOMIC PATHOLOGY SUMMARY -- Spleen, lymph nodes, and associated vessels

I composed this portion of my report as a (check one):

_____ A. Summary of regional anatomic pathology with integrated histopathology.

_____X_____ B. Summary of organ system anatomic pathology with integrated histopathology.

GROSS ANATOMY

The spleen was located in its normal position in the upper left quadrant behind the stomach and just in front of the diaphragm. It appeared normal in shape but slightly large in size. The color was a dark brown with some variation in the color gradient. The capsule was thin and covered with peritoneum except at the hilum where the capsule thickened and the peritoneum was absent. The arteries and veins to the spleen were typical, with one tortuous artery and several veinous tributaries contributing to the splenic vein. No obvious blockage of the splenic artery was observed. There was no evidence of surgery on the spleen and there was not an accessory spleen.

The lymph nodes in a majority of the body appeared to be normal. However, the mediastinal lymph nodes in the right thoracic cavity were enlarged and rubbery with an unusual appearance of the internal anatomy and histology. As the right lung was extremely abnormal and the lymph from the lung drained into the abnormal lymph nodes, the anatomy and histology of the lymph nodes will be included with the discussion on the lung.
HISTOLOGY

The splenic capsule consists of dense irregular connective tissue. Continuous with the capsule are parenchyma-penetrating trabeculae, with arteries and veins. The body of the spleen contains red and white pulp. White pulp is composed of a thick accumulation of lymphocytes surrounding an artery. The lymphocytes comprise the periarterial lymphatic sheath. Nodules of the white pulp contain germinal centers (proliferation areas for B-cells). The red pulp is responsible for about 80% of the splenic body mass; it contains many red blood cells that are being filtered through the spleen and degraded. Red pulp consists of splenic sinuses separated by splenic cords. Splenic cords are a meshwork of reticular cells and extracellular fibers; common cells found in the cords are red blood cells and macrophages. Small arterial branches, penicilli, deliver blood to splenic cords. Splenic sinuses collect blood cells and plasma to return back to circulation; the sinuses are usually seen as spaces in the parenchyma.

At first glance, the structure of the spleen appears normal: red and white pulp, trabeculae, and capsule were present. A closer look reveals an abnormally large amount of red blood cells present in the red pulp. The majority of the white pulp seen was active germinal centers surrounded by a highly dense population of lymphocytes. This indicates an elevated level of B-cell proliferation and differentiation.

INTEGRATED DISCUSSION OF ANATOMY AND HISTOLOGY

It can be concluded from the histological observations that the patient had congestion of the spleen, which was evidenced by its microscopic abundance of red blood cells. This, in turn, explains the slight splenomegaly observed grossly. According to the pathologist, the patient experienced right heart failure, which presents with systemic signs of engorged blood vessels in body organs. Thus, the enlargement of the spleen is probably attributable, at least in part, to the congestion of the cardiovascular system. Additionally, the active germinal centers with increased numbers of lymphocytes observed on the slide probably contributed to the splenomegaly. Furthermore, the active germinal centers reflect that the patient was possibly immunocompromised and attempting to fight the infection at the time of her death. Generally speaking, the abnormal appearance of the spleen grossly and histologically was a reflection of the systemic health of the patient rather than the health of the spleen itself.