Colorectal Metastasis Within an Adult Male Cadaver: Case Report and Review of Literature

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INTRODUCTION

During a routine lab dissection, lesions were found to be scattered along the mesentery of the colon and small intestines, as well as the abdominal peritoneum. Due to its presentation and histological analysis, a diagnosis of adenocarcinoma was made. Adenocarcinomas are mucus-secreting cells that are found within and near the glands of organ (Nakhaie, Mohsen et al., 2020). One of the most common clinical manifestations of adenocarcinomas is within the colorectal region due to the numerous mucous secreting cells found within these sites. Literature reviews have indicated that different metastasis patterns that can differentiate between adenocarcinomas of various histological subtypes.

OBJECTIVE

The primary objective of this study is to analyze the progress of metastasis of an adult male cadaver found in a routine academic dissection.

METHODS

The basis of this study consisted of an academic dissection of a 75 y/o male cadaver and a systematic review of pertinent literature regarding metastasis of colorectal adenocarcinomas. Histopathological slides were taken from the small intestine mesentery, ileocecal junction, liver, lungs, epidermis of the left lateral anterior neck, abdominal aorta and abdominal peritoneum. The histopathological sections were prepared at the Colquitt Regional Hospital laboratory by paraffin sectioning and H&E staining.

Colorectal Metastasis¹ & Primary Tumor²

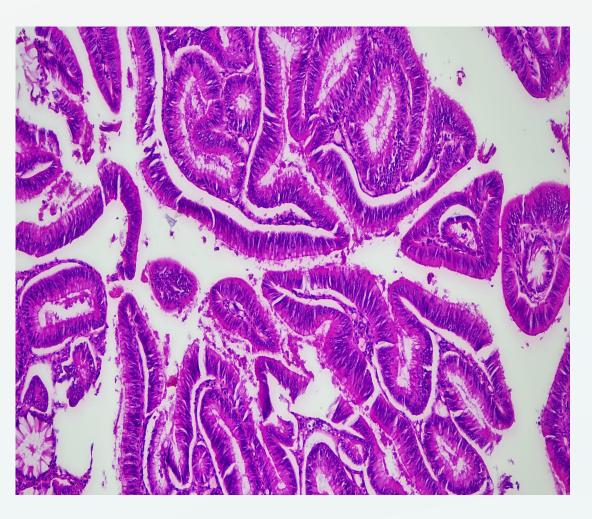




Figure 1: Well differentiated adenocarcinoma at the Cecum

Figure 2: Primary tumor site of adenocarcinoma found at the ileocecal junction

Liver Metastasis

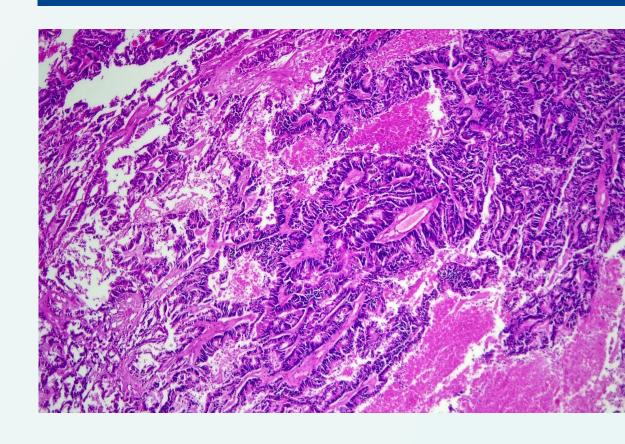




Figure 3: Histology appearance of Liver Metastasis

Figure 4: Gross appearance of Liver Metastasis

Peritoneum

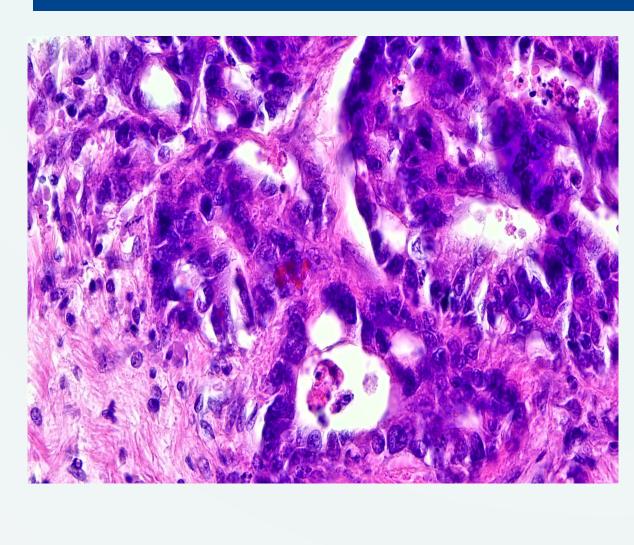




Figure 5: Histological appearance of abdominal peritoneum

Figure 6: Gross appearance of abdominal peritoneum

Mesentery of the Small Intestine

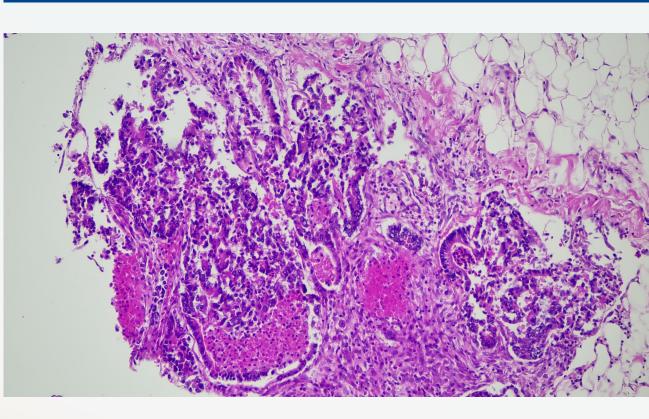




Figure 7: Histological appearance of mesenteric metastasis

Figure 8: Gross appearance of the mesentery of the small intestine

RESULTS

Current histological slides indicate the presence of adenocarcinoma within the abdominal peritoneum as well as the small intestine mesentery. Recent histological findings indicate that the primary tumor was located at the ileocecal junction and is consistent with an adenocarcinoma. Histological findings also show secondary metastasis to the liver. The lung nodule was found to be fibrocalcific. Histological analysis of abdominal aorta was found to be atherosclerotic and thrombotic. The cyst on the epidermis of the neck was found to be benign.

Colorectal carcinoma has been found to spread through the lymphatic or hematogenous systems, primarily affecting the liver and lungs (Willet, et al., 1984). Our results demonstrated metastasis from the adenocarcinoma primary tumor located in the ileocecal junction to the liver, peritoneum and mesentery of the small intestine. A biopsy of the lungs was taken, but our results confirmed a benign calcified nodule located in the left middle lobe, denying metastasis spread to the lungs.

CONCLUSION

Overall, the samples obtained was consistent with the diagnoses we made, which was adenocarcinoma. Our sample showed that adenocarcinoma was well differentiated at the primary site which was the ileocecal junction. However, it was moderately differentiated at the site of local spread which was the mesentery and peritoneum. The adenocarcinoma was poorly differentiated at the site of hematogenous metastasis, in the liver.

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