AGGRESSIVE METASTATIC ADENOCARCINOMA OF COLON IN YOUNG HISPANIC FEMALE MASQUERADING AS SKULL BASE OSTEOMYELITIS

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INTRODUCTION

Colorectal cancer (CRC) is the third most common cancer in men and women in the United States. Studies suggest that 20% of patients present with metastasis, most commonly to liver and lungs. Few cases have been reported with metastasize to the skull. Statistical data suggest a steady increase in CRC in patients under fifty years of age. We present an atypical presentation of metastatic adenocarcinoma of colon to the base of the skull in a young female patient.

CASE PRESENTATION

Case of a 36 year old female patient without medical history who presented with one month history of posterior neck pain radiating to her right ear with associated recurrent otitis refractory to oral antibiotics. There was no family history of CRC and no history of toxic habits. Physical exam with benign abdomen. Digital rectal exam with no abnormalities. Laboratories remarkable for leukocytosis with neutrophilia, thrombocytosis, hypochromic microcytic anemia; elevated alkaline phosphatase, hypoalbuminemia and normal liver function tests. Negative HIV and hepatitis profile. Head and Neck CT scan with asymmetrical nodular fullness in the posterior nasopharynx with extension and invasion of clivus consistent with osteomyelitis of skull base (Figure 2) for which patient was started on broad spectrum IV antibiotic therapy. However, patient deteriorated with aphasia, right cranial nerve abducens paresis. Head and neck CT angiography with right cavernous sinus thrombosis requiring full dose anticoagulation. After developing acute right upper quadrant abdominal pain with decreased levels of hemoglobin without any visible bleeding source, abdominopelvic CT was performed and showed a large distal sigmoid peri colonic mass measuring 11cm x 9.4cm (Figure 1) with disseminated metastatic disease. Brain MRI confirmed clivus metastatic lesion. Liver biopsy (Figure 3) confirmed adenocarcinoma of colon. Serologic markers with elevated carcinoembryonic antigen; negative cancer antigen (CA) 19-9 and CA 125. Hospitalization was complicated due to rapidly progressive multiorgan failure for which neither colonoscopy nor chemotherapy were feasible. Supportive comfort care and hospice management were provided.

IMAGING STUDIES

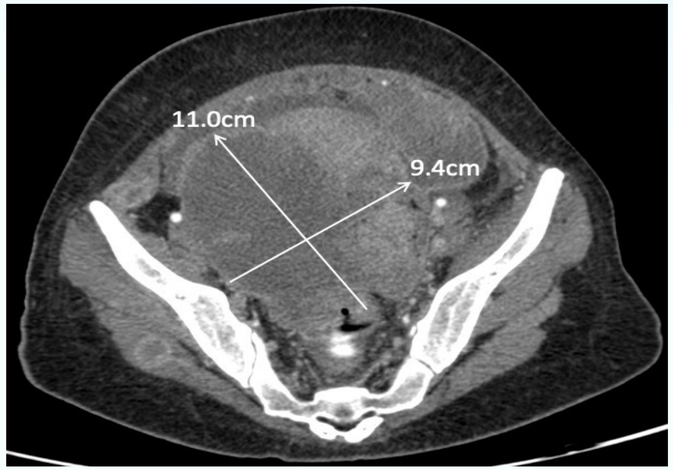

Figure 1. Abdominopelvic CT scan showing necrotic heterogenous pericolonic mass in the distal sigmoid measuring 11.0 cm x 9.4 cm.

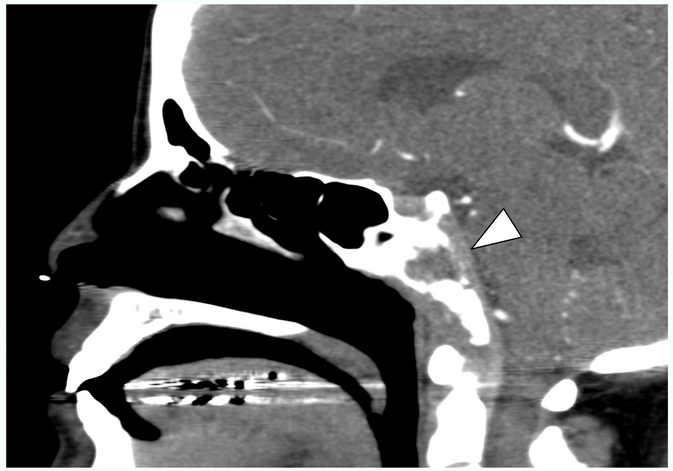

Figure 2. Head and Neck CT scan sowing (white arrowhead) Invasion of the clivus with permeative pattern with extraosseus extension of soft tissue.

ANCILLARY STUDIES

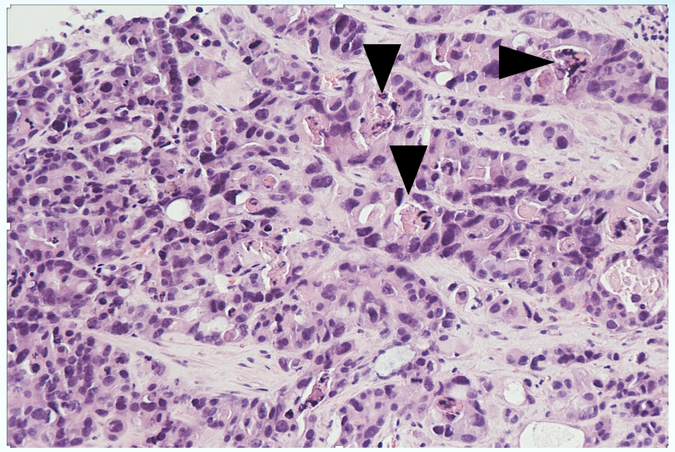

Figure 3. Liver core biopsy showing metastatic adenocarcinoma with necrotic debris ("dirty necrosis") within the lumina of adenocarcinomatous glands (arrowheads). Tumor cells are arranged in poorly formed glands. (200x)

DISCUSSION

United States statistical data reports an incidence of 12% of CRC among people under 50 years old. In younger population, CRC presents in a clinically advanced and biologically more aggressive disease. Therefore, close attention to alarming and atypical symptoms in this population should warrant low threshold for early colonoscopy screening.

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