METASTATIC GINGIVAL ADENOCARCINOMA FROM A PRIMARY LESION OF THE COLON

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During the last twenty years there has been no report of an adenocarcinoma of the abdominal viscera metastasizing to the gums. It appears, moreover, that any type of malignancy producing secondary metastatic lesions in this site is unusual, although Matti 1 reported a hemangio-endothelioma of the thyroid with a metastatic nodule in the gingiva, and it is possible that such rare metastases may occur in the diffuse miliary type of cutaneous carcinomatosis and be unnoticed.

In the present instance the microscopic structure of the gum margin lesion is so similar to that of the primary colonic lesion and the hepatic metastasis that little doubt remains that this is a true secondary lesion.

REPORT OF CASE

CASE 13686: J. R. C., a thirty-three-year-old railroad brakeman, was admitted to the hospital on May 22, 1934, complaining of pain in the left half of the abdomen, distention, and constipation. He had always been in good health with the exception of a septic infection following an injury to his elbow five years earlier, and a knee injury four years prior to the present entry. There was no familial history of cancer, although the cause of his father's death was unknown.

The present symptoms had begun five weeks before admission to the hospital and had become progressively worse.

Physical examination disclosed a palpable mass in the left lower quadrant, which was not tender or spastic. The diagnosis was made roentgenologically soon after entry, when a barium enema disclosed a carcinoma at the iliopelvic junction, causing complete obstruction.

The red blood count was 4,080,000; the white blood count 18,800; hemoglobin 57 per cent. The differential count was normal. The Kahn test was negative and urinalysis was negative except for the presence of 6 leukocytes per high-power field in the microscopic examination.

On May 26, 1934, an exploratory laparotomy revealed a large annular type of carcinoma of the sigmoid which had metastasized to the regional lymph nodes. A resection and a colostomy were done because of the obstruction. The patient returned home June 9, 1934, the colostomy functioning properly.

The resected specimen consisted of 14 cm. of sigmoid, in the mid-portions of which was a hard, annular constriction completely girdling the bowel. On opening the lumen the lesion was found to measure 4 cm. in diameter and to have a cauliflower border with a scooped-out necrotic base. Microscopic study showed it to be a typical adenocarcinoma with abundant mucus formation and irregular acinar formations with numerous mitoses.

The patient became progressively cachectic and was obliged to return to the hospital on Jan. 14, 1935, because of failure of the colostomy to function. He stated that a small tumor had begun to develop the latter part of November or early in December on the gum margin near the left upper first molar tooth. It moved about in the buccal cavity on a pedunculated base and had been increasing in size in the few weeks prior to entry. It could be observed as a soft, reddish-pink tumor on a thin stalk. It measured about 18 mm. in

1 Schweiz. med. Wchnschr. 16: 59, 1935.
length and 1.0 cm. in width. The tip was somewhat ulcerated and had a tendency to bleed. This polypoid growth was removed shortly after readmission by simply snipping it off with scissors. The pathological report described it as a soft, pink tumor measuring 18 mm. in length and 12 mm. in diameter, the shape of an oblate spheroid. Its otherwise smooth surface showed a rough, eroded area at one pole. Microscopically the tumor was composed almost exclusively of irregular adenomatous tissue made up of hyperchromatic tumor cells showing numerous mitoses. There was some mucus formation and but little fibrous stroma. The border showed tissue necrosis and masses of bacteria with an underlying inflammatory reaction. At certain points bits of intact and normal stratified squamous buccal epithelium still clothed the periphery of the tumor. The diagnosis was metastatic adenocarcinoma, grade II, probably secondary to the tumor in the sigmoid, which showed a similar microscopic picture.

On Jan. 15, 1935, a Wetzel type of ileostomy was done to relieve the obstruction, and at this time it was noted that metastatic nodules were present in the liver. The patient gradually became weaker and died on Jan. 27,

At necropsy the following findings were considered significant. The peritoneum was smooth and glistening. The liver was enormously enlarged, extending from the third interspace on the right to the iliac crest, and was riddled with numerous white, firm, well circumscribed masses varying in size from a pin-head to an orange. The larger ones showed necrosis and liquefaction in their centers, and it was calculated that they occupied over half of the liver substance. Some of the periaortic nodes were enormously enlarged and on cross-section showed the same structure and necrosis as the lesions in the liver. No other evidence of metastasis was found, with the exception of a few small nodules in the lungs, each measuring less than 5 mm. in diameter.

Anatomical diagnosis: Carcinomatous metastases to the liver, lungs, and regional lymph nodes, the primary source undoubtedly being an adenocarcinoma of the sigmoid which had been resected eight months previously.

Microscopic sections through the nodules in the lungs and liver showed hyperchromatic cells of irregular size, with numerous mitoses. There was some pink-staining mucoid material in the lumen of the acini, the adenomatous structure was irregular and areas showed considerable cellular necrosis and loss of tissue structure.
Discussion

It appears that the gingival tumor was unquestionably secondary to the lesion in the sigmoid by reason of their almost identical microscopic structure. This certainty is furthered by the finding at necropsy of metastatic lesions in the lungs and liver, also bearing a close microscopic resemblance. The lesion in the mouth did not appear until six months after the first symptoms of colonic obstruction, and was not removed immediately because of the overwhelming gravity of the visceral malignancy.

Summary

A case of adenocarcinoma of the sigmoid with a metastatic secondary nodule in the gingiva is reported. Necropsy findings disclosed pulmonary and hepatic metastases of the same microscopic structure. The authors believe that a solitary, visible, secondary lesion of this type in the gums has not been previously reported. Since adenomatous malignancy in this rare location may occur in some future case before the primary growth is recognized, the possibility of such a lesion not being a primary, mixed, or dysontogenetic tumor should be considered.