

## Cheek Mass as a Presentation of Metastatic Rectal Cancer

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Cheek metastasis from colorectal cancer is very unusual. We report on a 79-year-old female rectal cancer patient who underwent low anterior resection and lymph node dissection. The initial stage for this patient was T3N0M0 (by AJCC 1997). Postoperatively 49 months later, she presented with a right cheek mass that progressively enlarged within 2 weeks. Computed tomographic (CT) scan showed a well-defined 5 × 5-cm mass over the right parotid space and infratemporal fossa. The tumor was noted to be displacing the right masseter muscle laterally with obliteration of the medial border. In addition, destruction of the right mandible was also noted. Histology of this right cheek mass revealed it to be a metastatic adenocarcinoma, which was similar to that of the primary rectal adenocarcinoma. Multiple metastases including to the bone, lung, and liver were also found. The patient only underwent radiotherapy to the right cheek mass because of its rapid growth. Chemotherapy was not considered due to her advanced age. She did not complete the entire radiation therapy course because she expired. In our review, this is a very rare case presenting with cheek mass metastasis from rectal carcinoma. It was associated with widespread and aggressive disease due to rectal cancer. (*Chang Gung Med J* 2002;25:345-8)

**Key words:** cheek metastasis, distant metastasis, rectal carcinoma.

Distant metastases from colorectal cancer occur most frequently to the liver, lung, peritoneum, bone, ovaries, and adrenal glands.<sup>(1)</sup> Other metastatic sites described include the brain,<sup>(2)</sup> skin (lesion sites include the face, local abdominal incisional wound, trunk, palms, big toe, chest, ankle, and forearm),<sup>(3-7)</sup> pancreas,<sup>(8)</sup> spleen,<sup>(9)</sup> larynx,<sup>(10)</sup> and tongue.<sup>(11)</sup> We report on a patient who presented with a right cheek mass metastasis from rectal cancer. This type of case is very rare in the literature.

### CASE REPORT

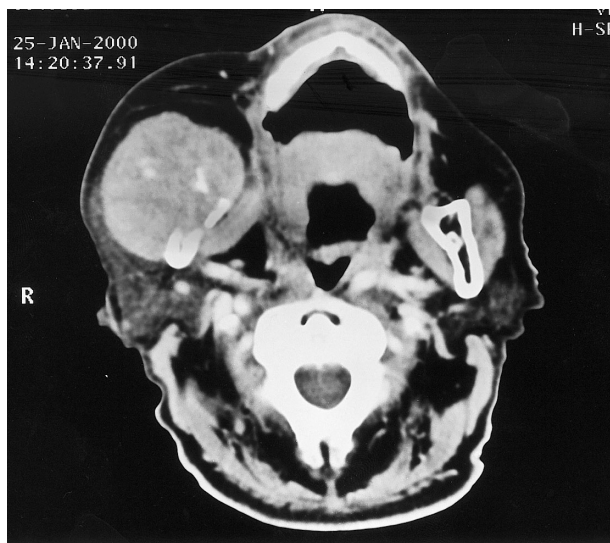
A 79-year-old female patient who had suffered from a small caliber of stool and changes in her bowel habits underwent sigmoidoscopy which

revealed an ulcerative tumor located 10 cm from the anal verge. She underwent a low anterior resection on December 1995. During the operation, the surgeon also found a 4 × 4 cm ulcerative tumor located 10 cm from the anal verge, but at that time, the liver and peritoneum were both tumor-free. The pathological findings revealed a moderately differentiated adenocarcinoma invading through the muscularis propria into the perirectal tissues but not invading other organs. Twelve attached regional lymph nodes and 2 IMA lymph nodes were all negative. Other oncology surveys including chest x-ray, bone scan, and liver echogram were normal. So the initial stage for this patient was T3N0M0 by AJCC 1997.<sup>(12)</sup> Postoperatively, this patient received no adjuvant therapy because of her advanced age. She was regu-

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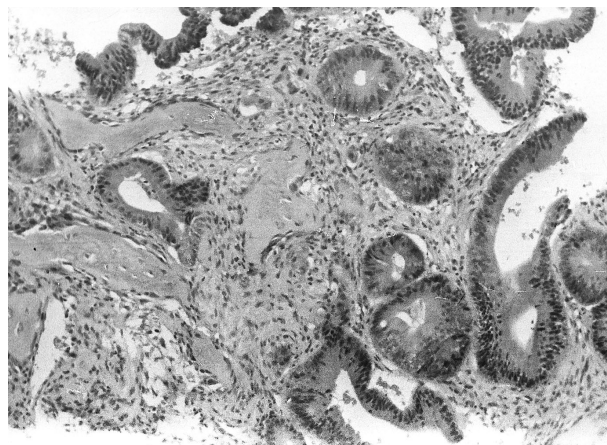
Received: Aug. 16, 2001; Accepted: Feb. 25, 2002

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**Fig. 1** Computed tomographic scan showing a well-defined 5 × 5-cm soft tissue mass in the right parotid space and infratemporal fossa. The mass was noted to be displacing the right masseter muscle laterally with obliteration of the medial border. In addition, destruction of the right mandible with bony fragments within the mass was also noted.

larly followed-up at the proctology clinic. Forty-nine months later, she presented with a right cheek mass, which progressively enlarged within 2 weeks. Tenderness was noted, but the outer cheek skin and inner buccal mucosa were intact. Computed tomographic (CT) scan with and without contrast enhancement showed a well-defined 5 × 5 cm soft tissue mass with heterogeneous enhancement in the right parotid space and infratemporal fossa. The mass was noted to be displacing the right masseter muscle laterally with obliteration of the medial border. In addition, destruction of the right mandible with bony fragments within the mass was also noted (Fig. 1). Histology of true-cut biopsy specimens from this right cheek mass confirmed it to be a metastatic adenocarcinoma composed of irregular neoplastic glands with fibrotic stroma, and it was seen to be invading the surrounding bone and soft tissue. The histology was similar with that of the primary rectal adenocarcinoma (Fig. 2). The CEA (carcinoembryonic antigen) level at that time was 185 ng/ml. Bone, lung, and liver metastases were also noted by bone scan, chest x-ray, and liver sonog-



**Fig. 2** Biopsy of the mandible and soft tissue. Histologic examination revealed a metastatic adenocarcinoma comprised of tall columnar cells forming irregular glandular structures in the fibrotic stroma with bony trabeculae. (H & E, × 165)

raphy, respectively. At that time, systemic chemotherapy was not considered due to her advanced age. The patient only underwent radiotherapy to the right cheek mass because of its rapid growth. The radiation dose was 5040 cGy over 6 weeks. She did not complete the entire radiation therapy course, because she expired.

## DISCUSSION

Facial soft tissue metastases from colorectal cancer are very rare. Only a very few patients with facial skin metastases from colorectal cancer have been reported in the literature. In 1993, Lookingbill et al. reviewed 4020 patients, of which 413 had colorectal carcinoma, and only 18 (4.4%) patients were revealed to have cutaneous metastases.<sup>(3)</sup> Of those 18 cases, 11 had metastases located in the surgical wound from the resection. Of the remaining 7, only 1 patient had metastatic involvement of the face, 1 involved the scrotum, and the others were located on the trunk. In 1970, Gottlieb et al. reported 1 case of cutaneous metastases from carcinoma of the colon.<sup>(4)</sup> There was metastatic disease involving the chin, the lower parts of both eyelids, and the tip of the nose. The patient died 6.5 months after the diagnosis of skin metastasis.

In 1999, Danikas et al. reported a case of rectal carcinoma with malar metastasis.<sup>(13)</sup> This was also the first case of facial soft tissue metastasis from rectal carcinoma in the literature. The 64-year-old woman had rectal cancer with initial lung metastasis. She was treated with an operation and chemotherapy. Postoperatively 20 months later, she presented with a left facial soft tissue mass invading the bone and skin. The platysma muscle was displaced laterally, and the masseter muscle was involved. There was extension into the masticator space and bony involvement of the zygomatic arch. In addition, a CT scan and MRI showed a mass in the right sylvian region, a much smaller mass in the left sylvian region, and a third lesion in the lateral right thalamus. The patient underwent radiation therapy and received 3600 cGy to the brain and 3000 cGy to the left facial mass over 3 weeks. She died 2 months later.

In our patient, this 79-year-old woman initially presented with rectal cancer (T3N0M0). Postoperatively 49 months later, a metastatic right cheek soft tissue mass with mandible bone destruction was noted, but the facial skin and buccal mucosa were intact. At that time, multiple metastases including to the bone, lung, and liver were also found. Systemic chemotherapy was not given due to her advanced age. The patient only underwent radiotherapy to the right cheek mass because of its rapid growth. She did not complete the entire radiation therapy course because she expired. Both the patient reported by Danikas et al.<sup>(13)</sup> and the present case had multiple metastases and expired soon after their cheek masses were noted. This may mean that facial soft tissue metastasis from rectal cancer is a very poor prognostic sign.

In our patient, the right cheek mass was over the right parotid space and was noted to be displacing the right masseter muscle laterally with obliteration of the medial border. In addition, destruction of the right mandible with bony fragments within the mass was also found. The outer cheek skin and inner buccal mucosa were intact on physical examination. We could not differentiate by means of the single head and neck CT scan we performed if the formation of the right cheek mass was from direct metastasis to

the facial soft tissue or was a bone metastasis with an expansive mass. The pathophysiology of this cheek mass formation is worthy of further investigation.

Although the incidence of metastases to the facial skin and soft tissue from rectal cancer is very low, physicians should keep this type of metastatic pattern in mind, because both cutaneous and soft tissue metastases are generally indicative of widespread and aggressive disease in colorectal cancer.<sup>(7)</sup>

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## 以臉頰腫塊表現之直腸癌轉移

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大腸直腸癌轉移至臉頰是非常罕見的，今報告一79歲女性直腸癌患者經腫瘤及淋巴結摘除術，疾病期別依照AJCC 1997分期為 T3N0M0，手術後49個月病人發現右側臉頰腫大且迅速長大，電腦斷層顯示為一5×5公分大之腫塊位於顳下窩處，將右側咬肌推擠至旁，並且右側下頷骨也被侵犯，經切片證實為一轉移性的腺癌，且病理型態與原發直腸癌的病理型態類似，此病人同時合併有骨頭、肺臟及肝臟之轉移。病人接受臉部腫塊之放射線治療，但不幸於療程中病逝。回顧文獻記載，直腸癌轉移以臉頰腫塊表現是十分罕見的，且代表此疾病已廣泛而嚴重的蔓延全身，其預後是非常差的。(長庚醫誌 2002;25:345-8)

**關鍵字：**臉頰轉移，遠處轉移，直腸癌。

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