# Gastric Carcinoma Presenting with Cellulitis-Like Cutaneous Metastasis

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## ABSTRACT

**Introduction: A case of carcinoma of the stomach presenting with cellulitis-like cutaneous metastasis is reported.**

**Clinical Picture: This patient was diagnosed to have early stage carcinoma of the prostate (T1bN0M0), which was treated with radiotherapy and hormonal therapy. He presented with an erythematous area of induration over the right neck a few weeks after the completion of radical radiotherapy. The CT scan of the neck showed features suggestive of cellulitis of the right cervical region. Due to the lack of response to intravenous antibiotics, a fine needle aspiration biopsy of the indurated area was done. This confirmed the presence of adenocarcinoma. Due to the presence of iron-deficiency anaemia and the positive occult blood test in the stool, an upper gastrointestinal endoscopy was done. This confirmed the presence of adenocarcinoma of the stomach of the signet-ring cell type.**

**Outcome: He had a rapid downhill course after the diagnosis and died four weeks after the diagnosis was made.**

**Conclusion: Carcinoma of the stomach can rarely present with cutaneous metastasis as a cellulitis-like picture.**


**Keywords: Gastric adenocarcinoma, cellulitis, cutaneous metastasis**

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## INTRODUCTION

Patients with gastric carcinoma may infrequently present in a very unusual manner such as bone marrow failure, disseminated intravascular coagulation, and occasionally with cutaneous lesions prior to diagnosis of the disease. Dermatological paraneoplastic manifestations of gastric carcinoma have been described, and these include dermatomyositis, acanthosis nigricans, migratory thrombophlebitis, pemphigoid and others. Cutaneous metastases from gastric carcinoma generally take the form of nodular lesions and the usual location is the periumbilical or umbilical region ("Sister Mary Joseph's nodule"). We report this unusual patient who was diagnosed to have gastric carcinoma after he presented with a clinical and radiological picture suggestive of cellulitis of the neck.

## CASE REPORT

TSH was a 67-year-old man who had background history of ischaemic heart disease with double-vessel disease and had undergone coronary artery bypass surgery in 1995.

He was diagnosed to have T1bN0M0 adenocarcinoma of the prostate in May 1998 when he presented with acute retention of urine. The Gleason grading was 3+4 (moderately differentiated adenocarcinoma). He opted for hormonal treatment with Goserelin Acetate and Flutamide followed by radical prostate radiotherapy.

He was admitted on 12 October 1998, a few weeks after completion of radiotherapy, for investigation of a rapidly progressive right-sided neck redness and induration of three months' duration. This was associated with difficulty in swallowing and neck pain. He had no complaints of cough, shortness of breath, malaena or significant loss of weight.

He admitted to having dyspepsia over the last six months for which he was on medication from his general practitioner.

On clinical examination he had evidence of a diffuse erythematous and warm induration with ill-defined margins over his right cheek and neck. There was no significant cervical lymph node enlargement. Examination by an otolaryngologist did not reveal any abnormalities in the ear or upper aerodigestive tract. Chest and abdominal examination were normal. The initial clinical impression was that of cellulitis of the neck.

Computed tomography (CT) scan of the postnasal space showed no mass in the postnasal space or skull base. There was reticulation of the subcutaneous tissues on the right side of the neck. This was associated

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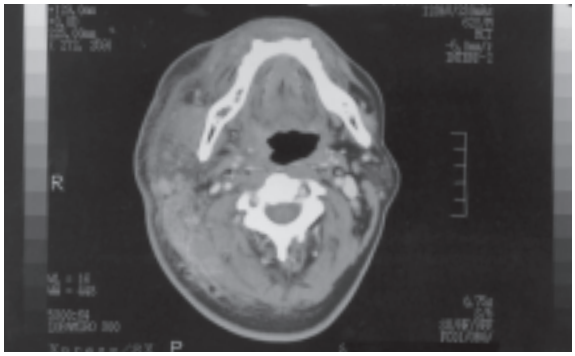

**Fig.1** CT scan showing reticulation of the subcutaneous tissue on the right neck and thickening of the right platysmus and sternocleidomastoid muscles.

with thickening of the right platysmus muscle and sternocleidomastoid muscle (Fig.1). There was no significant lymphadenopathy or obvious abscess formation. The features were suggestive of cellulitis of the neck. He was started on intravenous Cloxacillin in view of the clinical and radiological findings.

As his skin condition did not improve after a week of antibiotics, a fine needle aspiration biopsy of the neck induration was performed. This showed evidence of metastatic adenocarcinoma. The serum prostate specific antigen (PSA) was normal at 0.4 ug/L (0 - 4). However, the serum carcinoembryonic antigen (CEA) was elevated at 20.4 ug/L (0.5 - 3.5). The hemogram and biochemistry showed presence of iron-deficiency anaemia. A gastroscopy was subsequently performed on 23 October 1998, and this revealed a tumour at the incisura of the stomach. The biopsy of this mass confirmed the presence of a poorly-differentiated adenocarcinoma with signet cell change.

The CT scan of the chest and abdomen showed masses in the head of pancreas and para aortic region compatible with metastatic lymph node enlargement. There were no obvious pulmonary or hepatic metastases.

The patient was referred to a general surgeon who felt that surgery was not indicated due to the presence of systemic disease and the relatively minor local symptoms, which could be addressed adequately with conservative measures. The patient declined chemotherapy and opted for palliative radiotherapy to his neck. He was discharged on 4 November 1998 after completing radiotherapy.

He was readmitted two weeks later seriously ill, febrile and jaundiced with severe abdominal pain.

He was treated as for hepatobiliary sepsis however, he did not respond to treatment and he collapsed and died the following day. He survived for about four weeks from the date of diagnosis.

## DISCUSSION

Skin metastasis is uncommon, ranging from 0.2% to 9% of autopsies performed in cancer patients[1-4]. It is generally a minor or evolving manifestation of a widely dissemination disease. However, on rare occasions, it can be the sole presenting manifestation leading to the diagnosis of the primary, as in this case. The most frequent primary non-dermatological tumours associated with skin metastasis include breast, lung, and colorectal cancers[3,4]. Skin metastasis from the upper digestive tract is relatively infrequent and accounts for 0.4% to 6% of cutaneous metastasis[3-6].

Cutaneous metastasis from gastric carcinoma may be solitary or multiple and have been reported to appear on the head, eyebrow, neck, axilla, chest, and fingertip[6]. The commonest site of skin metastasis is around the umbilical region, usually referred to as the "Sister Mary Joseph's Nodule". Patients with cutaneous metastasis from gastric cancer usually present with skin nodules. They can rarely present with a zosteriform pattern or an erysipelas-like pattern, lesions resembling an epidermoid cyst, condyloma acuminatum, or a benign soft tissue tumour[6]. Gastric carcinoma presenting with infiltrative cellulitis or erysipelas like lesion as in this patient is extremely rare and in our literature search, there were three other documented case reports[7-9]. As in most other case reports the prognosis of patients presenting with skin metastasis is poor in view of the advanced and disseminated nature of the disease[1,2,5,6,10-12].

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