**Cutaneous Metastasis of Signet Cell Gastric Carcinoma**

**Simay Cokgezer, Nilay Sengul Samanci¹, Mert Bektas, Nuray Kepil², Fuat Hulusi Demirelli¹**

**Abstract**

Gastric cancer is the fourth most commonly diagnosed cancer and the second most common cause of cancer-related death worldwide. Cutaneous metastases of signet-ring cell gastric carcinoma are uncommon. Here, we report a metastatic gastric adenocarcinoma, which manifested itself as an asymptomatic scar-like lesion on the epigastric area and histopathological features of the cutaneous lesion showing signet-ring cell.

**Key Words:** Cutaneous metastasis, indurated scar-like lesion, pancytokeratin AE1-AE3 antibodies, signet cell gastric carcinoma

**Introduction**

Cutaneous metastases of signet-ring cell gastric carcinoma (SRCC) are very rarely.[1] Cutaneous metastases are seen most frequently secondary to carcinomas of the breast, lung, colon, rectum, ovary, head, neck, kidney, and the gastrointestinal tract.[2] Here, we report a case of metastatic gastric adenocarcinoma, which manifested itself as an asymptomatic scar-like lesion on the epigastric area and histopathological features of the cutaneous lesion showing signet-ring cell.

**Case Report**

A 75-year-old female patient was admitted to hospital with a complaint of indurated scar-like lesions on the epigastric area [Figure 1]. Her medical history revealed stage IIIa (T4aN1M0) gastric signet-ring cell adenocarcinoma, 3 years ago. At that time, she had undergone total gastrectomy and lymph node dissection. Her surgical pathology reports revealed cancer-free margin, and surgery was followed by adjuvant chemotherapy (infusional folinic acid + 5-Fluorouracil [FUFA]) and radiotherapy directed to the gastric lodge. The disease was in remission for 3 years. After 3 years, the patient presented with an asymptomatic indurated scar-like lesion on the epigastric area [Figure 1]. An incisional biopsy was taken from the left hypochondriac skin. Histopathological sections showed diffuse dermal infiltration of cells with signet-ring morphology resulting from cutaneous metastasis of SRCC. Immunohistochemical studies showed positivity for pancytokeratin AE1-AE3 antibodies and negativity for GCDFP-15, CK7, S-100, HMB-45, MELAN A, and CD45 antibodies. The diagnosis of metastatic signet-ring cell carcinoma was made on the basis of the histopathological examination [Figures 2 and 3]. Computed tomography revealed progression to pretracheal, prevascular, subcarinal lymph nodes and pleural effusion, pericardial effusion. She was scheduled for a second round of chemotherapy (5-fluorouracil, infusional folinic acid, and oxaliplatin).

**Discussion**

Gastric cancer is the fourth most commonly diagnosed cancer and the second most common cause of cancer-related death worldwide.[3,4] Gastric carcinoma has several classifications such as clinically, histologically, and on anatomic location-wise.[5] The 2010 WHO classification recognizes four major histologic patterns of gastric cancers: tubular, papillary, mucinous, and poorly cohesive (including signet-ring cell carcinoma).[6] The classification is based on the predominant histologic pattern of the carcinoma. SRCC is defined as a poorly cohesive carcinoma composed predominantly of tumor cells with prominent cytoplasmic mucin and a crescent-shaped

---

**Address for correspondence:**
Dr. Simay Cokgezer,
Department of Internal Medicine,
Istanbul University Cerrahpasa Medical Faculty Hospital, Istanbul, Turkey.
E-mail: simaycokgezer@gmail.com

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

**How to cite this article:** Cokgezer S, Samanci NS, Bektas M, Kepil N, Demirelli FH. Cutaneous metastasis of signet cell gastric carcinoma. Indian J Dermatol 2020;65:148-50.

**Received:** June, 2018. **Accepted:** August, 2018.
ovaries, central nervous system, bone, pulmonary, or soft-tissue metastases occur. Rarely, internal cancers metastasize to the skin through the hematogenous or lymphatic spread of tumor cells. Internal cancer tumor cells may also be seen in the skin as a result of direct tissue invasion or iatrogenic implantation. Clinically, cutaneous metastases of SRCC can be red or violet; they may present as a single or multiple hyperpigmented nodules, showing zosteriform, erysipelas-like, allergic contact dermatitis-like, cellulitis-like patterns, or scar-like lesions.

They have been reported to appear on the head, neck, eyebrow, chest, and fingertips. In this case, the lesions were scar-like on the epigastric area. Since skin metastases are rare, attention should be given to patients with bizarre skin lesions. Lesions should be sampled by biopsy as was in our case.

**Declaration of the patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understood that name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. Aneiros-Fernandez J, Husein-ElAhmed H, Arias-Santiago S, Escobar Gómez-Villalva F, Nicolea A, O’Valle Ravassa F, et al. Cutaneous metastasis as first clinical manifestation of signet ring cell gastric carcinoma. Dermatol Online J 2010;16:9.
2. Saeed S, Keehn CA, Morgan MB. Cutaneous metastasis: A clinical, pathological, and immunohistochemical appraisal. J Cutan Pathol 2004;31:419-30.
3. Schinzari G, Cassano A, Orlandi A, Basso M, Barone C. Targeted therapy in advanced gastric carcinoma: The future is beginning. Curr Med Chem 2014;21:1026-38.
4. Ferlay J, Shin HR, Bray F, Forman D, Mathers C, Parkin DM, et al. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. Int J Cancer 2010;127:2893-917.
5. Hu B, El Hajj N, Sittler S, Lammert N, Barnes R, Meloni-Ehrig A, et al. Gastric cancer: Classification, histology and application of molecular pathology. J Gastrointest Oncol 2012;3:251-61.
6. Berlth F, Bollschweiler E, Drebber U, Hoelscher AH, Moenig S. Pathohistological classification systems in gastric cancer: Diagnostic relevance and prognostic value. World J Gastroenterol 2014;20:5679-84.
7. Lauwers G, Carneiro F, Graham D, Curado M, Franceschi S. Classification of Tumours of the Digestive System. 4th ed. Lyon: IARC Press; 2010. p. 48-8.
8. Lookingbill DP, Spangler N, Helm KF. Cutaneous metastases in patients with metastatic carcinoma: A retrospective study of 4020 patients. J Am Acad Dermatol 1993;29:228-36.

9. Kaur S, Aggarwal P, Dayal S, Sangwan A, Jain VK, Jindal N, et al. Cutaneous metastasis from signet-ring gastric adenocarcinoma in a carcinoma en cuirasse pattern: An unusual clinical-diagnostic sequence. Indian J Dermatol 2015;60:637.

10. Pernot S, Voron T, Perkins G, Lagorce-Pages C, Berger A, Taieb J, et al. Signet-ring cell carcinoma of the stomach: Impact on prognosis and specific therapeutic challenge. World J Gastroenterol 2015;21:11428-38.