中文題目:以「皮革胃」表現之轉移性浸潤性腺管乳癌

英文題目: Gastric Metastatic Invasive Ductal Carcinoma of the Breast presenting as Linitis Plastica

作 者:吳啟榮<sup>1</sup>,陳柏存<sup>2</sup>,蘇建維<sup>2,3</sup>,黃怡翔<sup>2,3,4</sup>,侯明志<sup>1,3</sup>

服務單位:<sup>1</sup>臺北榮民總醫院內科部、<sup>2</sup>臺北榮民總醫院內科部胃腸肝膽科、<sup>3</sup>國 立陽明大學醫學系、<sup>4</sup>國立陽明大學臨床醫學研究所

*Background*: Gastric metastasis of breast cancer can mimic primary gastric cancer when presenting as linitis plastica. It is a challenging diagnosis and mostly arises from invasive lobular carcinoma. However, a typical presentation does not always indicate a typical diagnosis. Here we present a case of gastric metastasis from breast invasive ductal carcinoma. With detailed patient's history and complementary lab studies, the correct diagnosis could be made.

*Case Presentation:* A 50-year-old perimenopausal woman presented easy-satiety sensation for more than 6 months. The patient reported no other discomforts so Esophagogastroduodenoscopy was ordered.

On examination, diffuse snakeskin appearance mucosa of the stomach, compatible with linitis plastic, was noted. Biopsy was performed in consideration of malignancy. However, profound hemorrhage occurred (Figure 1). Accordingly, the patient was admitted for monitoring.

Upon admission, the patient reported no abdominal pain. Abdomen was soft on palpation. The level of hemoglobin was 8.9 and 7.2mg/dl before and after endoscopic exam, respectively. With provisional diagnosis of gastric cancer, abdominal CT scan with contrast administration was performed. It showed diffuse gastric wall thickening, which was compatible with linitis plastica. Moreover, suspected peritoneal carcinomatosis and hepatic metastasis at S8 were noted. (Figure 2)

The patient has breast IDC (invasive ductal carcinoma which was positive ER/PR and negative HER-2/Neu), initially presented as a palpable mass 5 years

before admission. The patient had undergone neoadjuvant chemotherapy and modified radical mastectomy. Tamoxifen was given thereafter. The last time of cancer surveillance (six months before presentation) image was unremarkable.

Pathologist reported infiltrative carcinoma in mucosa. IHC (immunohistochemical) staining showed positivity in CK and GATA-3. Level of CA-153 was 3956.6 U/ml. Consequently, diagnosis of gastric metastasis of breast ductal invasive carcinoma was established. Oncologist was consulted for chemotherapy.

Thereafter, the patient received 6 rounds of gemcitabine/paclitaxel chemotherapy. The recent CA-153 level was 733.2 U/ml. The patient receives regular follow up at Oncologist's Outpatient.

*Discussion*: Gastric metastases of breast cancer are uncommon. In one Japan study with 6380 cancer patient autopsy series, 61 (0.9%) cases were found gastric metastases[1]. In another France study, the proportion was less than 0.1%[2]. In comparison, in 2014, the incidence of primary gastric cancer of women in Taiwan was 11.71 ‰. Among these patients, invasive lobular carcinoma accounted for the majority[2]. Gastric metastasis of invasive ductal carcinoma as linitis plastica is much rarer. Only three patients had been reported in medical literature[3, 4].

As a result, for this patient who remained disease-free status for 5 years after primary cancer treatment, primary gastric cancer is more likely the diagnosis in regard to epidemiology and cancer type. If detailed history were not attained and the Pathologist were not informed, the gastric cancer diagnosis would have caused a catastrophic result, gastrectomy.

Linitis plastica of primary gastric cancer is indistinguishable from metastatic one.[1] IHC staining of ER/PR to biopsy sample is not helpful because 10 to 30% primary gastric cancer presented positive ER/PR staining.[5] Loss of E-cadherin expression and GATA3 presence in metastatic lesion are reportedly diagnostic to breast invasive ductal carcinoma.[6, 7]

Diagnosis of metastatic linitis plastica from breast invasive ductal carcinoma is challenging. When encountering linitis plastica, it cannot be more important for we clinicians to review patient's history detailly before jumping in to the conclusion of primary gastric cancer.

*Conclusion*: Though differentiating gastric metastasis of breast cancer from primary gastric cancer is challenging, it is of paramount importance because the treatments to these two diseases are completely different. A wrong diagnosis could lead the patient to unnecessary gastrectomy. It is more challenging for gastric metastasis of invasive ductal carcinoma given its rarity. Only three patients with metastatic linitis plastica of invasive ductal carcinoma had been reported. Here we reported a case whose diagnosis was made correctly with complementary lab studies, clinically well-informed Pathologist and special immunohistochemical staining. Correct diagnosis and following treatment saved the patient from gastrectomy and prolonged her survival.

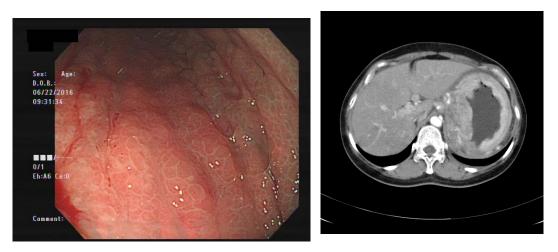


Figure 1

Figure 2

Keywords: Breast Cancer, Invasive Ductal Carcinoma, GATA-3, Linitis Plastica

## **References**

1.Oda, et al., *Metastatic tumors to the stomach: analysis of 54 patients diagnosed at endoscopy and 347 autopsy cases.* Endoscopy, 2001. **33**(6): p. 507-10.

2. Almubarak, M.M., et al., Gastric metastasis of breast cancer: a single centre

retrospective study. Dig Liver Dis, 2011. 43(10): p. 823-7.

3.Yasumichi Yagi, K.S., *Metastatic gastric carcinoma from breast cancer mimicking primary linitis plastica: a case report.* Oncology Letters, 2015(10): p. 5.

4.Rachan Shetty, K.S., et al., *Gastric metastases from breast cancer: A report of two cases and review of literature.* J Cancer Res Ther, 2015. **11**(3): p. 660.

5.Matsui, M., et al., *The prognosis of patients with gastric cancer possessing sex hormone receptors*. Surg Today, 1992. **22**(5): p. 421-5.

6.van Velthuysen, M.L., et al., *Expression of oestrogen receptor and loss of E-cadherin are diagnostic for gastric metastasis of breast carcinoma*. Histopathology, 2005.**46**(2): p. 153-7.

7. Miettinen, M., et al., *GATA3: a multispecific but potentially useful marker in surgical pathology: a systematic analysis of 2500 epithelial and nonepithelial tumors.* Am J Surg Pathol, 2014. **38**(1): p. 13-22.