

# Scalp Biopsy Leading to New Diagnosis of Metastatic Signet Cell Carcinoma

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## Introduction

- Signet cell carcinoma is a distinct subtype of gastric cancer diagnosed via the characteristic presence of cytoplasmic mucin & an eccentrically displaced nucleus.
- In recent years, the incidence of this cancer has been increasing.<sup>1, 2</sup>

## Case Description

- 70-year-old male with progressively worsening skin lesion on his left scalp.
- Edematous, firm pink plaques with surrounding alopecia, referred to dermatology.
- Punch biopsy was collected, and results revealed alopecia neoplastica, favoring metastatic signet-ring cell carcinoma of gastric origin.
- PET CT imaging demonstrated a narrowed segment of the proximal duodenum, moderate pericardial effusion, and multiple sclerotic osseous metastases.
- The patient was referred for EGD which demonstrated a pyloric channel infiltrative mass causing partial gastric outlet obstruction.
- EUS identified a hypoechoic circumferential mass in the pyloric region of the stomach, measuring 20 mm x 15 mm.
- A 22 mm x 90 mm uncovered metal stent was placed across the pyloric mass.
- Biopsies showed poorly differentiated gastric adenocarcinoma with signet cell features.
- Weeks later, the patient developed a large pericardial effusion causing tamponade physiology.
- A left thoracotomy and pericardial window followed.
- The pericardial fluid was also positive for metastatic signet cell adenocarcinoma.
- Patient completed 6 cycles of FOLFOX.
- Months later, he developed recurrent malignant pleural effusions requiring PleurX catheter placement and eventually succumbed to his disease.

## Discussion

- Cutaneous skin lesions will often be the first and only manifestation of an underlying malignancy.<sup>3</sup>
- Additionally, their presence portends a poor prognosis.
- Our case highlights an aggressive and difficult to treat subtype of gastric cancer diagnosed via skin biopsy.<sup>2,4</sup>
- Thorough skin examination is key to recognizing new or strange cutaneous findings.
- Biopsy is an easy and effective tool for diagnosis and can mean early diagnosis and treatment of malignancy.



**Figure 1.** Edematous firm pink plaques on left parietal scalp with surrounding alopecia

## References

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