A Rare Cause of Upper Gastrointestinal Bleeding

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Case Presentation

- 63-year old male
- 11/2015 Referred to the ER with sudden onset of:
 - Hematemesis
 - Epigastric pain

Physical Examination

- BP- 100/66, HR- 118/minute
- PR- no melena or bright red blood
- Abdominal exam unremarkable
- NG Tube coffee ground
- Lab: Hb 7.8 g\dL, Plt 252, INR 1.1
 - → PC, PPI, Hexakapron

Upper Endoscopy

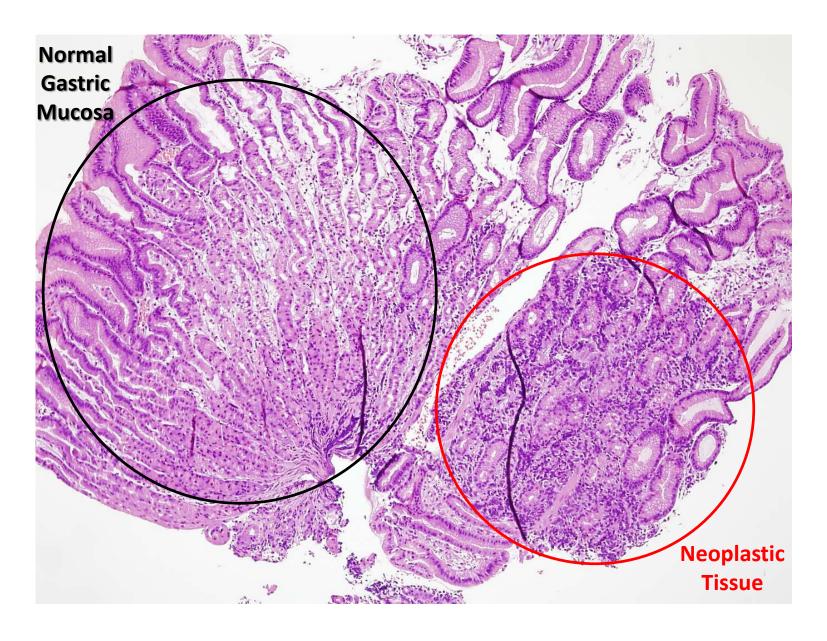




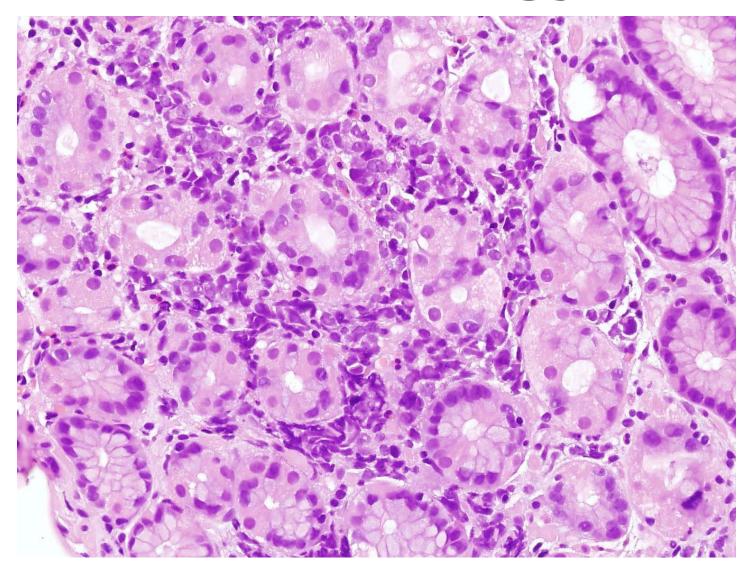




Histopathology

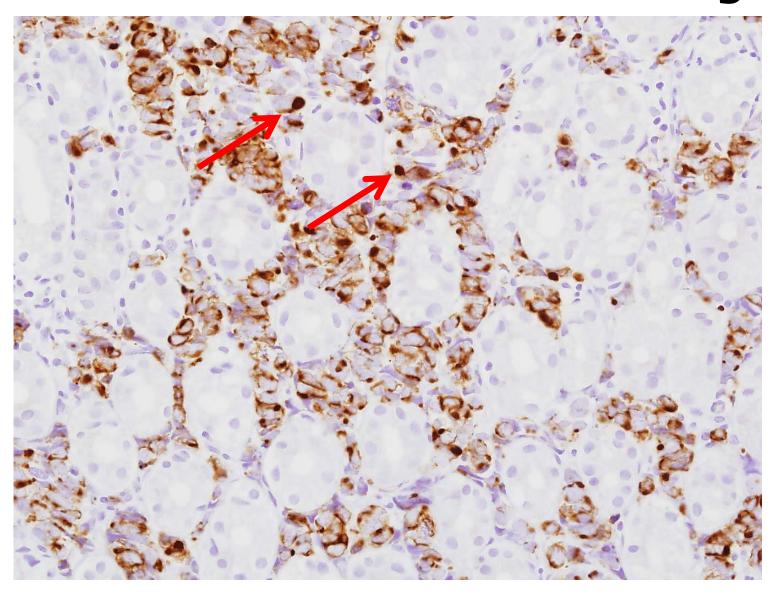


Histopathology



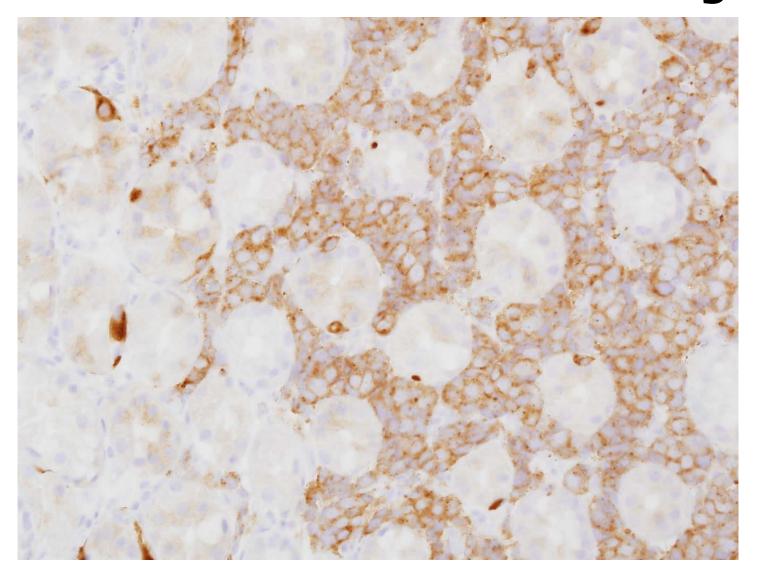
Homogenous and uniform round neoplastic cells around the gastric glands (H&E x40)

Immunohistochemistry

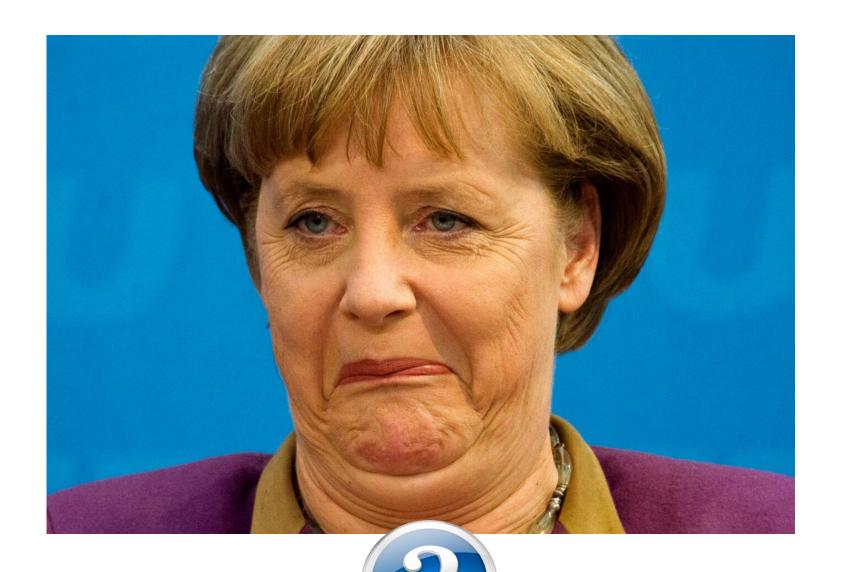


CK-20 positive tumor cells showing a characteristic perinuclear dot-like staining pattern

Immunohistochemistry



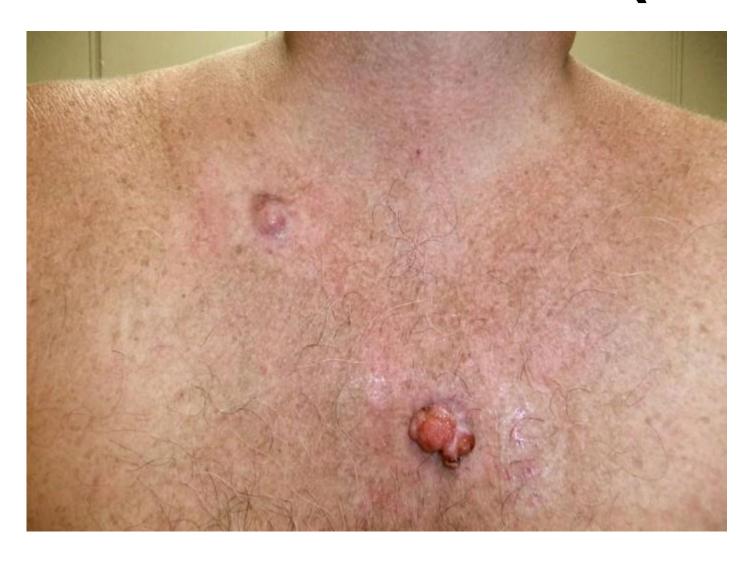
Tumor cells staining positive for synaptophysin



Back to Medical History

- GERD
- HTN
- Cholecystectomy (1994)

- 2014 presented with small cutaneous pink mass-chest + Lt. axillary lymphadenopathy
 - → local excision of skin lesion and axillary node
 - pathology Merkel cell carcinoma



- An <u>uncommon</u> and <u>highly aggressive</u> skin cancer
- Incidence 0.2 /100,000
- More common in older men (mean age 69)
- Arises from Merkel cells at the dermo-epidermal junction, which are of neuroendocrine origin

Risk factors:

- Excessive sun exposure
- Immunosuppression
- TNFα inhibitors-3 case reports; coincidence?
- Merkel cell polyomavirus

- <u>Painless, firm, raised lesion</u> involving sun-exposed areas with a <u>red</u> to bluish discoloration
- >50% metastasis- lymph nodes (60%), skin (30%), lung (23%), CNS (18%), bone (15%) and liver (13%)
- Poor survival

DD:

- Small cell lung cancer
- Small B-cell lymphoma
- Anaplastic small cell melanoma
- Ewing's sarcoma
- Neuroblastoma

- IHC aids to distinguish MCC from other tumors
- Expresses neuroendocrine (synaptophysin, chromogranin) + epithelial markers (CK20).
- Negative for S100, TTF1 and LCA

• Treatment- wide surgical excision of primary tumor + conjunction with adjuvant chemoradiation

MCC and GI Tract

Few cases GI tract metastases have been reported

Author(s)	Site of Metastasis
Li M and Liu C [11]	Stomach
Cubiella J, et al. [12]	Stomach
ldowu M, et al. [13]	Stomach
Wolov K, et al. [14]	Stomach
Krasagakis K, et al. [6]	Stomach, small bowel
Canales L, et al. [7]	Stomach, small bowel
Shalhub S, et al. [5]	Stomach, descending colon
Hizawa K, et al. [8]	Stomach, distal duodenum, pancreas
Olivero G, et al. [15]	Intestinal
Naunton M and Henderson RG [9]	Jejunum
Foster R, et al. [10]	Small bowel
Huang W S, et al. [16]	Rectum
Paterson C, et al. [17]	Anal canal
Adsay NV, et al. [18]	Pancreas
Bachmann J, et al. [19]	Pancreas
Dim DC, et al. [20]	Pancreas
Ouellett JR, et al. [21]	Pancreas

MCC and GI Tract

- 11 cases of gastric metastases in literature
- 80% of patients present with UGIB
- Epigastric pain, early satiety, weight loss
- 70% died within 4 months.
- 1 case of primary gastric MCC
- Patients may benefit from an aggressive strategy involving radical surgery and chemotherapy

Back to the Patient

- Recurrent massive hematemesis
- Underwent angiography with embolization of LGA
 - → ongoing GI bleeding
- Emergent surgical exploration- extensive abdominal metastatic disease
- → total gastrectomy, spelenectomy, distal pancreatectomy, adrenalectomy & partial colectomy were performed
 - complicated postoperative course deteriorated and died



Summary

- MCC is a rare, relentless and aggressive tumor.
- May mimic other small round cell tumors.
- Morphology + IHC establish correct diagnosis.
- Although extremely rare, GI involvement should be considered when evaluating GI symptoms in a patient with P/H of MCC.
- GI metastasis carries dismal prognosis.

Thank You