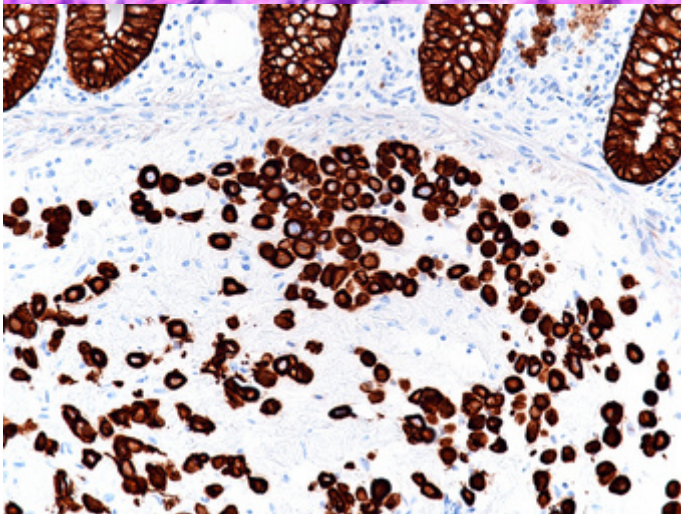
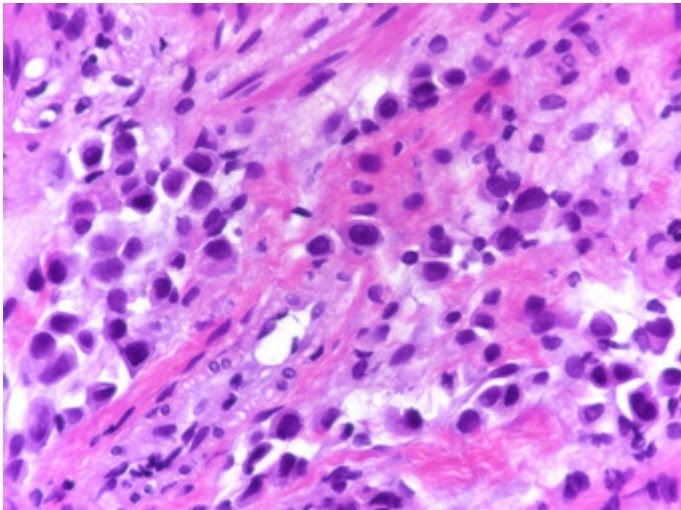
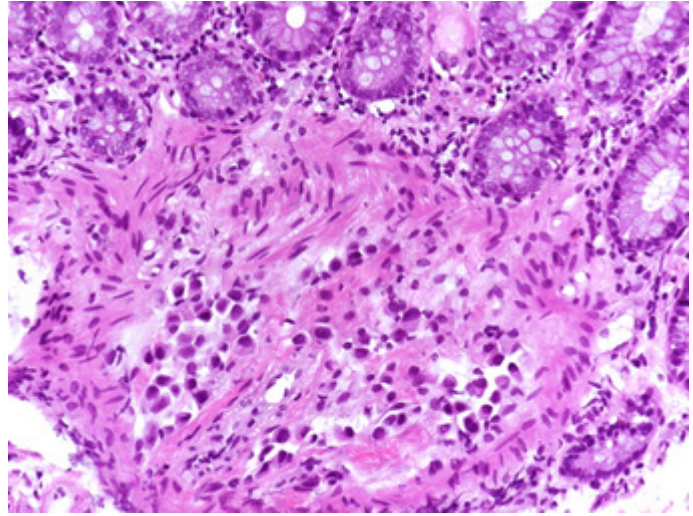
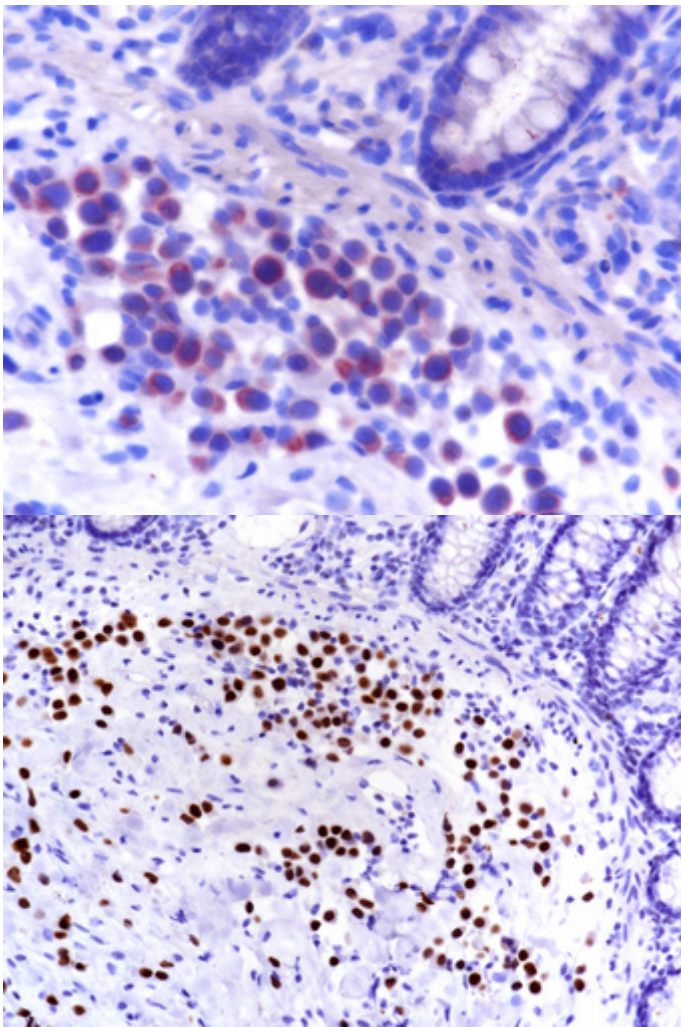


# October 2018

Colonic polyp in a 55-year-old male.

What is your diagnosis?





### Diagnosis:

Colonic metastasis due to plasmacytoid bladder cancer.

### Comment:

A 55 year-old male with history of transurethral resection of bladder cancer underwent colonoscopy for suspected cancer of the ascending colon, identified on CT scan performed for staging of his malignant bladder disease. The investigation showed a broad-based polypoid lesion within the ascending colon (Panel A).

Histologically, there was an infiltration of the colon wall with high-grade tumour cells with plasmacytoid features exhibiting non-cohesive growth pattern (Panels B-C). The histological aspect of these cells led to a differential diagnosis of secondary or primary colonic tumour and the first step was to rule out metastasis from his previously known cancer, which was plasmacytoid urothelial carcinoma. A panel of immunohistochemistry was done. Tumour cells were positive for pan-keratin (Panel D), high molecular weight keratin (Panel E) and GATA 3 (Panel F), while CDX2 and SATB2 were negative. Based on these findings, a final diagnosis of plasmacytoid urothelial carcinoma metastatic to the bowel was made.

Plasmacytoid urothelial carcinoma (UC) is an uncommon variant of bladder carcinoma where dyscohesive infiltrating cells can closely resemble plasma cells (1). The lesion was first reported in 1991 by Sahin et al. as a histopathologic variant of UC typically associated with presentation at advanced stage, poor prognosis, and predilection for peritoneal spread (2). Following greater experience with these lesions, it is now recognized that there is a spectrum of undifferentiated non-cohesive carcinomas of the bladder, characterized by loss of e-cadherin (3).

In contrast to other organs, such as liver, lungs, and bone, the GI tract is rarely affected by secondary tumours. Patients with secondary tumours frequently present at an advanced tumour stage, and the prognosis is often dismal. Secondary tumours can be found in both the upper and the lower GI tract, affecting stomach, small bowel and large bowel by direct invasion (including invasion by peritoneal carcinomatosis) or by vascular spread. Malignant melanoma, breast and pancreatic cancer represent the most common corresponding primaries. Secondary bladder cancer is exceptionally rare (4).

It is of note that owing to the rarity of disease, pathologists often do not “expect” a neoplastic lesion to be secondary. In this regard, the frequently observed failure to communicate knowledge of pre-existing malignant disease to the pathologist implies a risk of misdiagnosis, misclassification, or both and may lead to considerable delay in reaching a definitive diagnosis of secondary GI tract involvement. Biopsy diagnosis is crucial to avoid misclassification (4).

### For further reading:

- › Humphrey PA, Moch H, Cubilla AL, et al. The 2016 WHO classification of tumours of the urinary system and male genital organs-part B: prostate and bladder tumours. *Eur Urol.* 2016; 70: 106–119.
- › Borhan WM, Cimino-Mathews AM, Montgomery EA, Epstein JI. Immunohistochemical Differentiation of Plasmacytoid Urothelial Carcinoma From Secondary Carcinoma Involvement of the Bladder. *Am J Surg Pathol.* 2017; 41: 1570-1575.
- › Fox MD, Xiao L, Zhang M, Kamat AM, Siefker-Radtke A, Zhang L, Dinney CP, Czerniak B, Guo CC. Plasmacytoid Urothelial Carcinoma of the Urinary Bladder: A Clinicopathologic and Immunohistochemical Analysis of 49 Cases. *Am J Clin Pathol.* 2017; 147: 500-506.
- › Gilg MM, Gröchenig HP, Schlemmer A, Eherer A, Högenauer C, Langner C. Secondary tumors of the GI tract: origin, histology, and endoscopic findings. *Gastrointest Endosc.* 2018; 88: 151-158.e1.

### Presented by:

Dr. Adriana Zucchiatti, Barcelona, Spain, and Dr. Cord Langner, Graz, Austria.