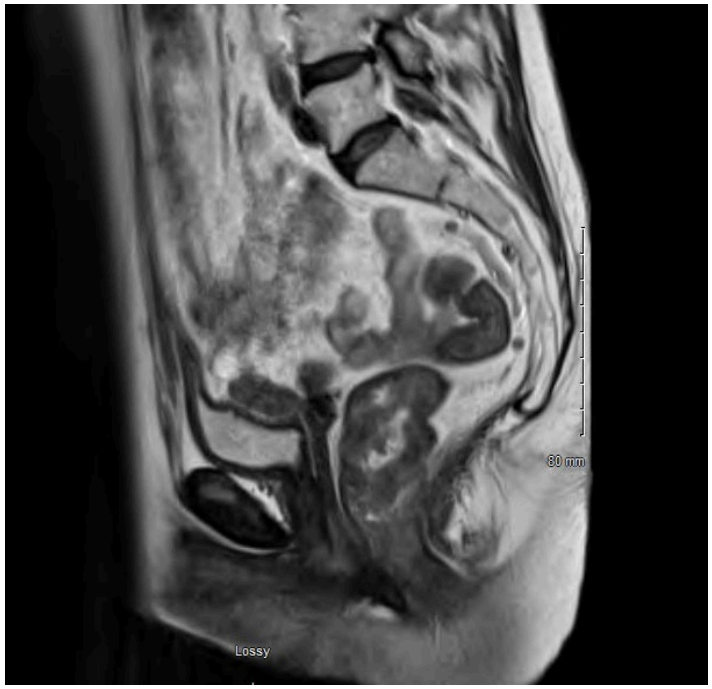
Rectal Cancer

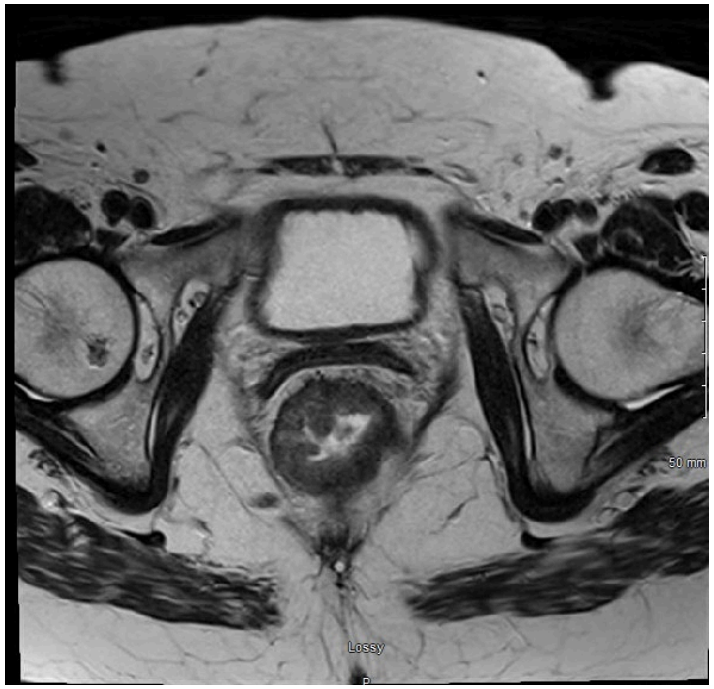
Case-Based Panel Discussion

Case 1

67 yo female presented with blood per rectum and colonoscopy demonstrating a large ulcerated mass in the distal rectum starting at about 2 cm above the dentate line and extending proximally for about 6cm. No other lesions/polyps. Pathology: MSI stable, moderately differentiated adenocarcinoma. CEA 4.6 ng/mL (0-4.7). CT CAP demonstrates no evidence of distant metastases.

MRI: T3b N2b





Discussion Points: sequencing of therapy, potential candidacy for NOM

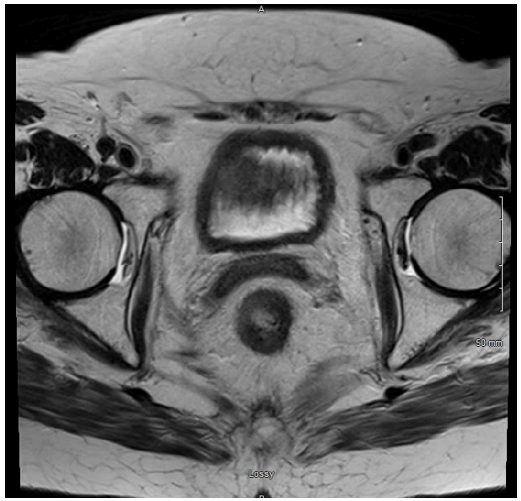
Completed 7 of 8 planned cycles of FOLFOX

Long course chemoradiation 50.4Gy in 28 fractions

Restaging: What studies and when?

CT: No distant progression

MRI: Radiographic CR

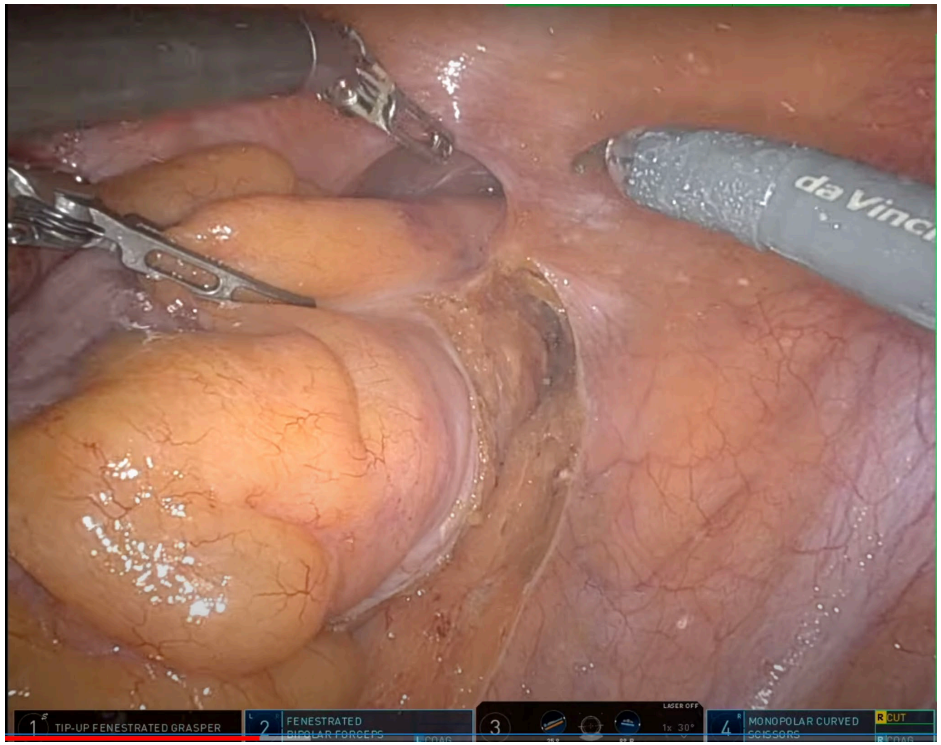


DRE: “good rectal tone, palpable 3cm mass, right posterolateral, 1.5cm proximal anorectal ring”

Endoscopy: Confirmed persistent active disease

Sphincter preservation?

Underwent robotic assisted low anterior resection with diverting ileostomy.

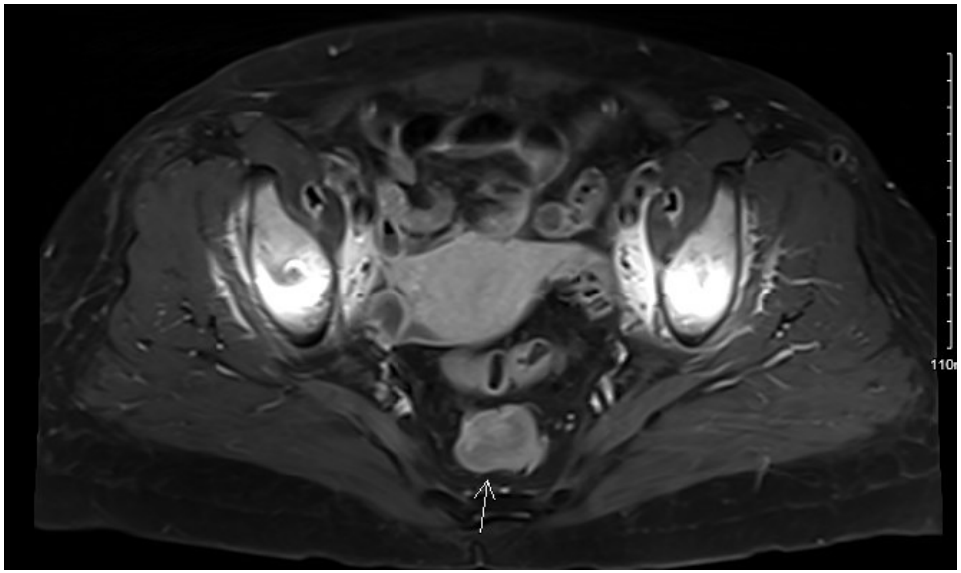


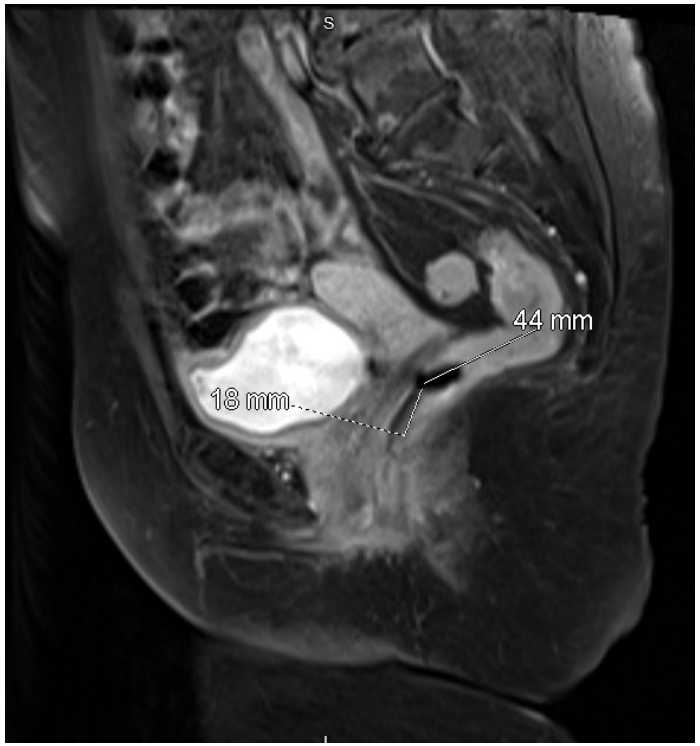
Pathology: ypT3 ypN0, margin negative (0.9cm from distal margin and 2cm from radial margin).

Case 2

70 yo female found to have large upper rectal/rectosigmoid mass on colonoscopy. Biopsy reveals MSI stable, moderately differentiated adenocarcinoma. CT CAP without evidence of metastatic disease. CEA 4.7 (0-4.7).

MRI: T2 N0





Management recommendations?

Case 3

51yo female underwent initial colonoscopy for hematochezia. A 6cm mass was identified at the splenic flexure and 1cm mass in the Rectum approximately 8cm from the anal verge.

Biopsy of splenic flexure mass: adenomatous mucosa with high grade dysplasia with absence of MLH1, MSH6, and PMS2 with retention of MSH2 protein expression on IHC.

Biopsy of rectal mass: moderately differentiated adenocarcinoma that is MSI stable on IHC

Thoughts? Further Testing?

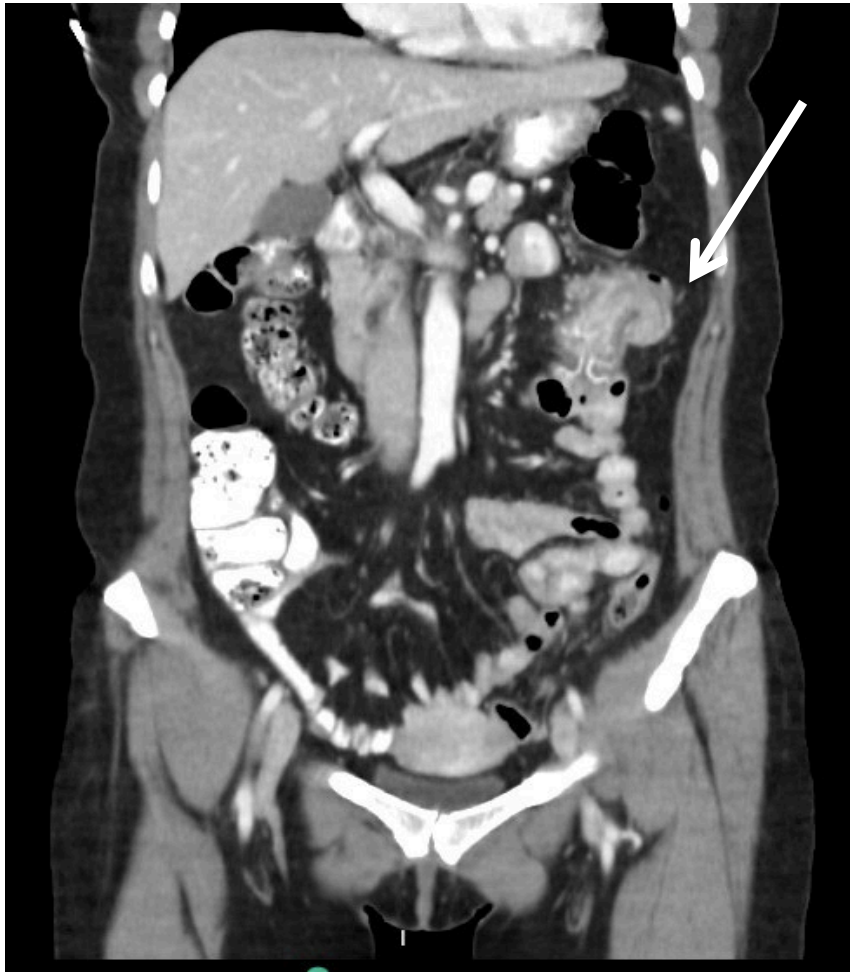
51yo female with synchronous colon and rectal cancers. IHC of colon cancer with loss of MLH1, MSH6, and PMS2 with retention of MSH2

BRAF mutation not detected

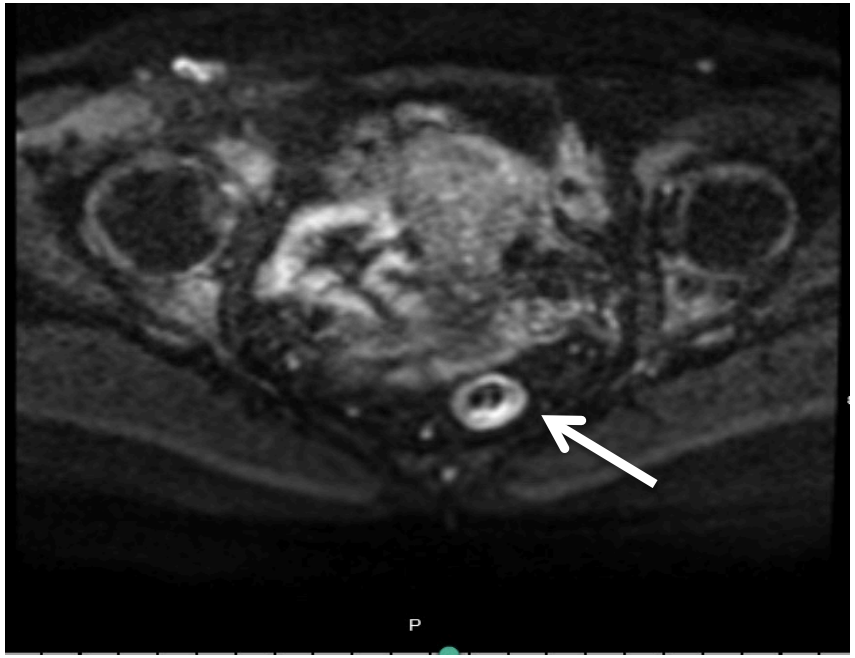
Germline testing

Gene	Variant	Zygosity	Classification
MLH1	c.2059 C>T p.(R687W)	Heterozygous	Pathogenic Variant
POT1	c.1373 G>A p.(G458D)	Heterozygous	Variant of Uncertain Significance

CT with bulky splenic flexure mass and regional adenopathy

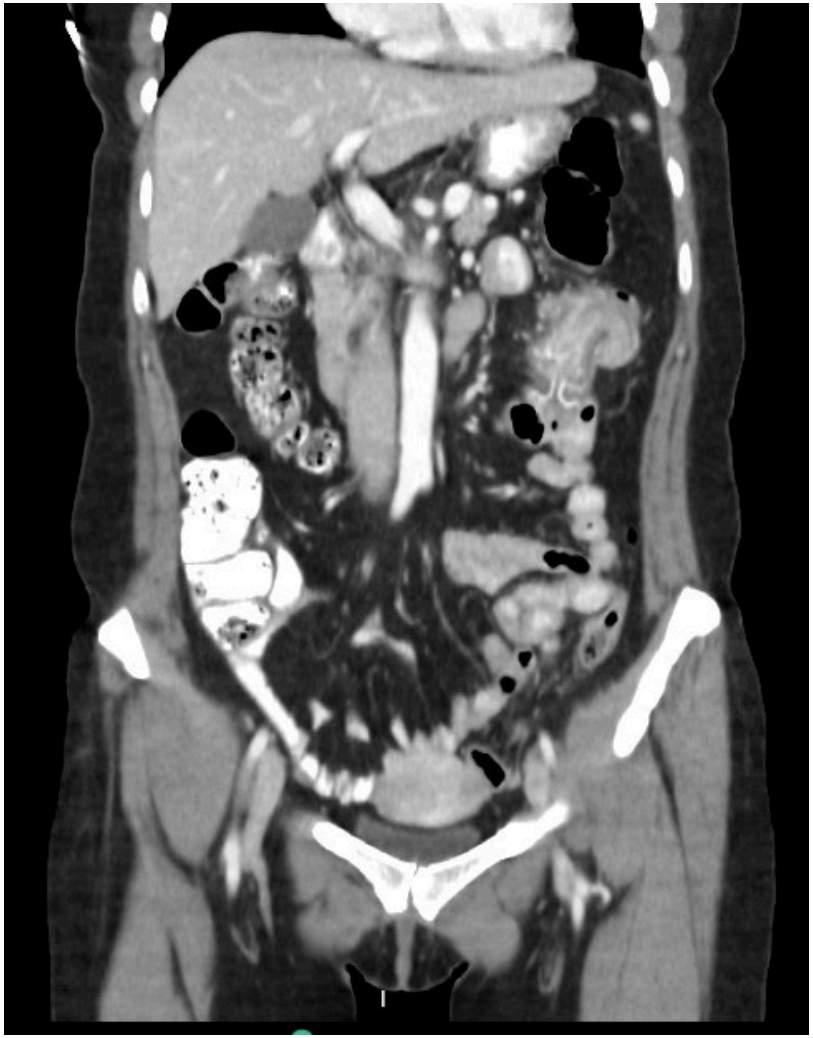


MRI with T2, N0 rectal cancer



Management?

After 4 cycles of Ipilimumab/Nivolumab complete resolution of splenic flexure mass on CT.



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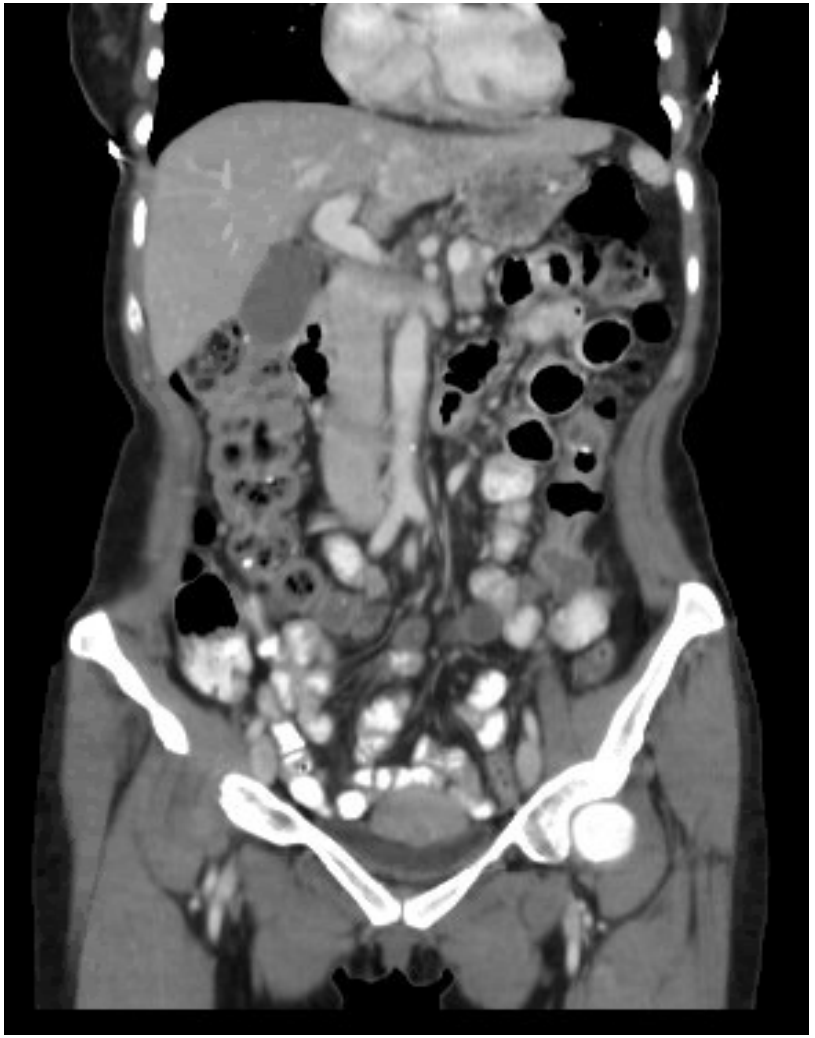

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Case 4

69 yo female presented May 2022 with rectal pain and bleeding. Colonoscopy demonstrated a large circumferential mass in the mid-upper rectum. Biopsy revealed grade 2, adenocarcinoma with IHC showing loss of PMS2 and intact MLH1, MSH2, and MSH6.

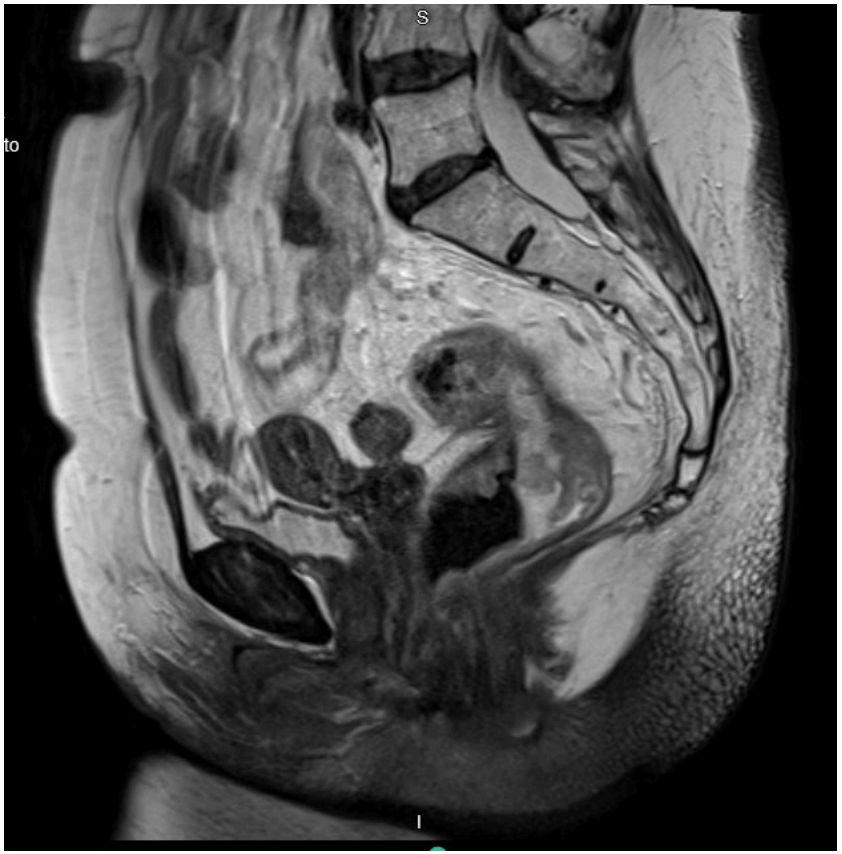
No personal history of other cancers. Father with a history of lung cancer, son with a "carcinoma" on his arm, no knowledge of mother's family history, 4 half siblings (same father) with no cancer history.

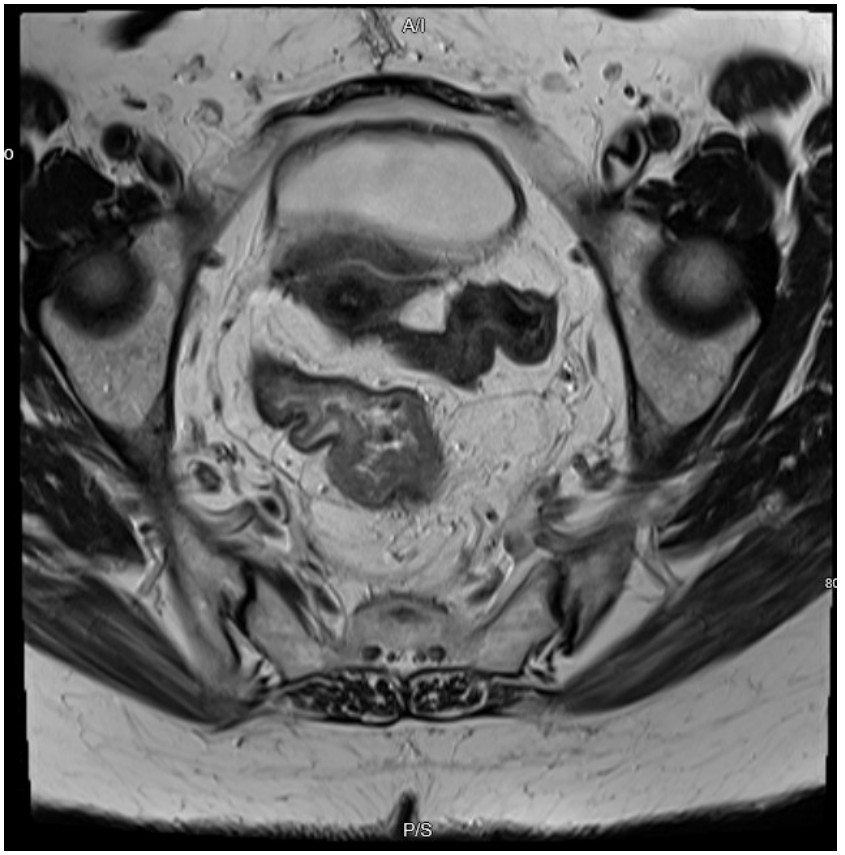
Further genetic testing?

GENE	MUTATION	THIS GENETIC TEST RESULT IS ASSOCIATED WITH THE FOLLOWING CANCER RISKS:
PMS2	c.804-60_804-59insSVA Heterozygous	HIGH RISK: Colorectal, Endometrial ELEVATED RISK: Ovarian, Gastric, Other, Pancreatic, Skin

What further evaluation/screening should be performed?

CT CAP: No evidence of metastatic disease
CEA 7.29 ng/mL (0-4.7)
MRI: T3 N1 mid-upper rectal tumor





Management Strategy?
(May 2022)

Received short course radiation – 2500 Gy in 5 fractions

Completed 6 months Ipilimumab/Nivolumab (5/22-11/22)

Treatment course complicated by development of stricture and bowel obstruction that was managed with an endoluminal stent.

MRI with with radiographic CR

Robot assisted low anterior resection with diverting ileostomy and TAH/BSO.

Pathology: ypT0 ypN0 (0/15) – pathologic CR, benign uterus and ovaries