RECURRENT BORDERLINE MUCINOUS TUMOURS OF OVARY PRESENTING AS COLONIC POLYP – A REPORT OF TWO CASES

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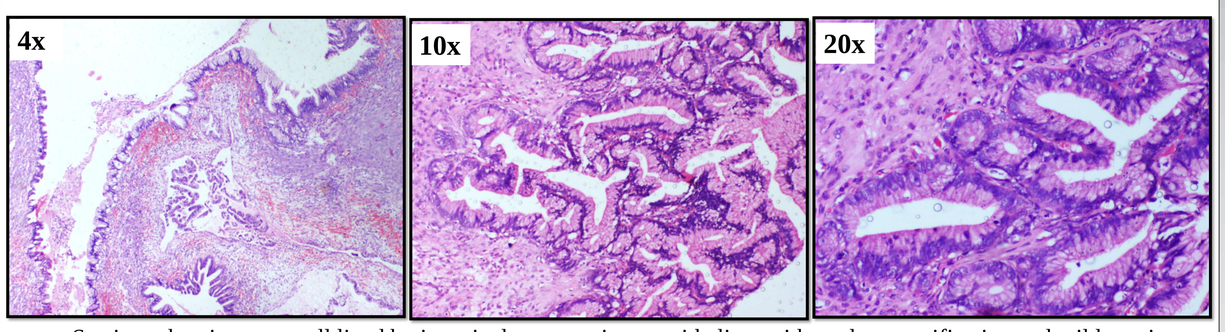
CASE 1

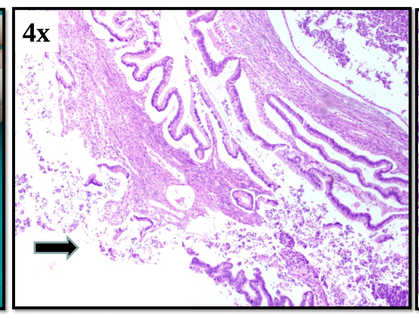
- 42 year old female
- Right ovariotomy 2016 - reported as Mucinous cystadenoma
- Total abdominal hysterectomy with left salpingo-ovariotomy 2017 - reported as Borderline mucinous tumour.
- Now presented with persistant pain and discharge per vaginum and rectum
- O/E - found to have mass per abdomen
- Colonoscopy – ulceroproliferative growth 10 cm from anal verge
- Colonoscopic biopsy done showed a few tiny fragments of atypical glands
- CT Abdomen and pelvis: heterogenous mass lesion 11.2x9.2x8.5cm in the hemipelvis , infiltrating the right lateral wall of sigmoid colon with endoluminal component and abutting bladder and rectum . No definite infiltration of other organs seen.
- CA 125 - 9.4IU/mL and CEA- 2.0ng/mL (within normal limits)
- Excision of complex mass with anterior resection and omentectomy done.



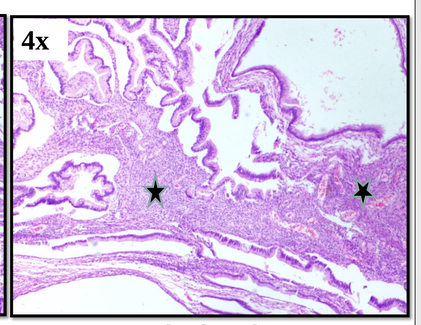
Sections showing cyst wall lined by intestinal type mucinous epithelium with nuclear stratification and mild atypia

- DIAGNOSIS (2019) : Borderline Mucinous Tumour Ovary

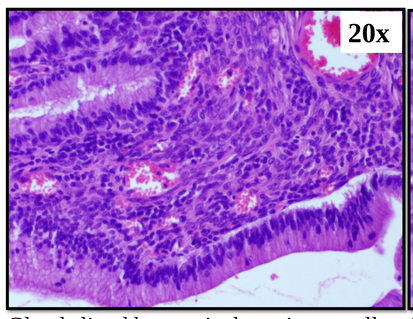
Anterior resection specimen showing the polypoidal growth (marked with arrow) within the colon

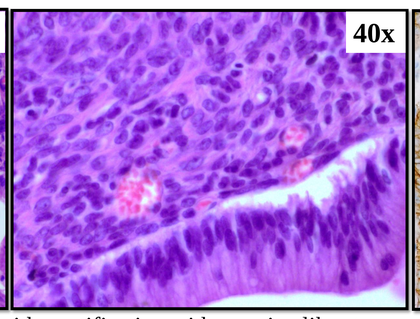


Section from polyp showing surface ulceration (marked with arrow)

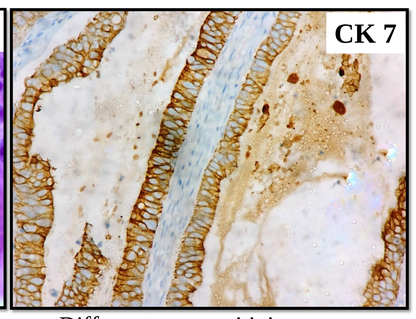


Mucinous glands with Ovarian like stroma (marked with star)

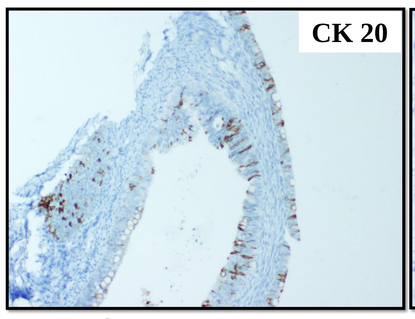




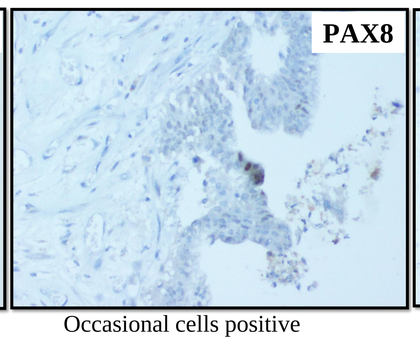
Glands lined by atypical mucinous cells with stratification with ovarian like stroma



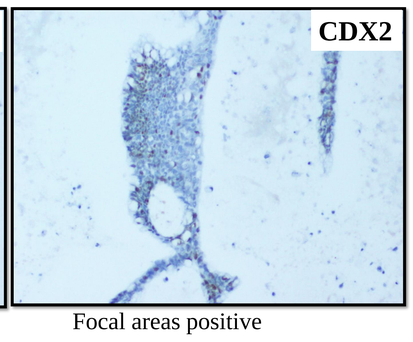
Diffuse strong positivity



Focal strong positivity



Occasional cells positive



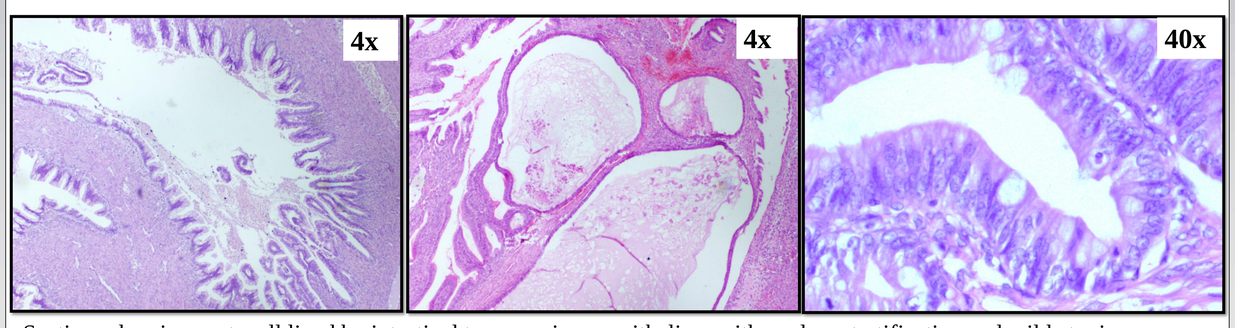
Focal areas positive

- DIAGNOSIS (2020) : Recurrent borderline Mucinous tumour forming serosal deposits on the Anterior resection specimen, infiltrating wall of colon and forming an intraluminal mass.

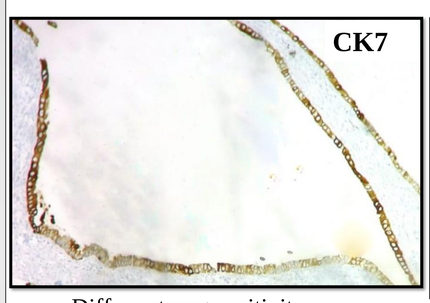
- Borderline mucinous tumour can recur if incompletely excised, if treated by cystectomy alone (possibly with spillage of tumor) or requiring adhesiolysis for removal.
- Recurrent tumour can contain residual ovarian stroma, involve the ipsilateral or contralateral ovary or the peritoneum.[1]
- Rare cases with invasion of underlying tissues such as bowel or vagina reported. [2]
- Some borderline tumours recur as mucinous carcinoma, likely due to an unsampled foci of invasive carcinoma.
- Our two cases presented clinically with visceral involvement, mimicking an invasive carcinoma or a second primary of colon. Histopathological examination showed it to be recurrent Borderline Mucinous Tumour invading the colon and presenting as colonic polyps. IHC profile of CK7(strong positive), CK20(focal strong positive), CDX2 (occasional positive) and PAX8 (occasional positive) were supportive of the morphological diagnosis of Borderline mucinous tumour.
- The patients are on regular close follow up.
- EXTENSIVE SAMPLING - mandatory in such cases to rule out an invasive focus.

CASE 2

- 40 year old nullipara , Known case of endometriosis
- Endometriotic cystectomy in 2004 and 2008.
- Total abdominal hysterectomy with left salpingo-oophorectomy in 2017 - reported as Borderline Mucinous tumour with extensive Endometriosis
- Ovariotomy for right adnexal mass in 2020 - reported as Borderline Mucinous tumour
- Presented with residual mass few months later
- CT Abdomen and pelvis: Right adnexal solid and cystic mass measuring 8.3x7.2x6.2cm, contiguous with vaginal vault, extending to ileo-caecal junction and infitrating into caecum. Distal ileal loops and sigmoid colon adherent to the mass.
- S. CEA- <0.5ng/mL , S. CA125- 24.7IU/mL (within normal limits)
- Cytoreductive surgery was planned
- Patient presented with acute abdomen and emergency explorative laparotomy was done.
- Right hemicolectomy with Low anterior resection done – due to intraoperative finding of dense adhesions and nodular deposits in the middle and lower rectum



Sections showing cyst wall lined by intestinal type mucinous epithelium with nuclear stratification and mild atypia



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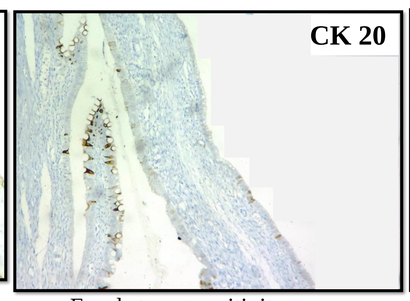

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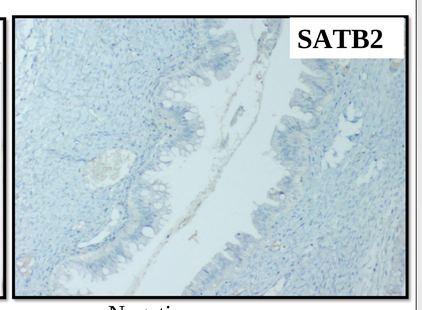
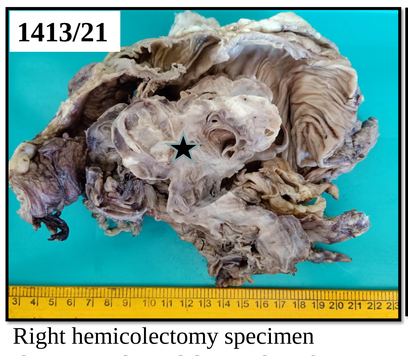
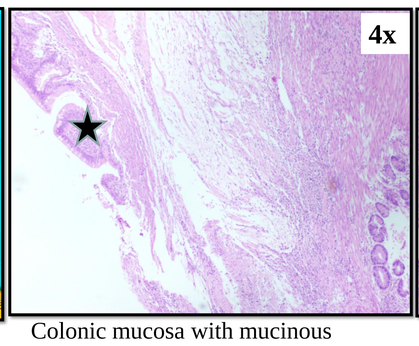


Negative

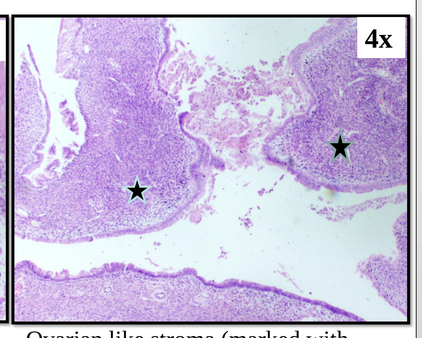
- DIAGNOSIS (2020) : Borderline Mucinous tumour Ovary



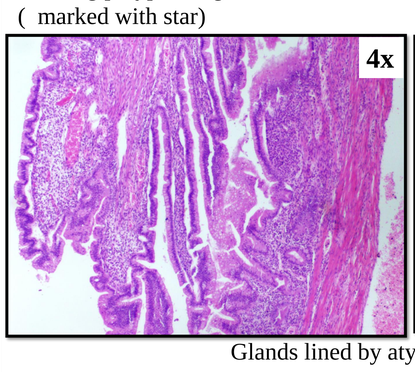
Right hemicolectomy specimen showing polypoidal growth within (marked with star)



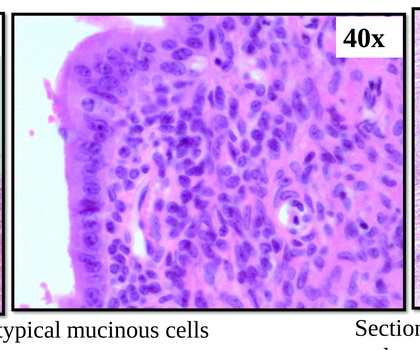
Colonic mucosa with mucinous tumour beneath (marked with star)

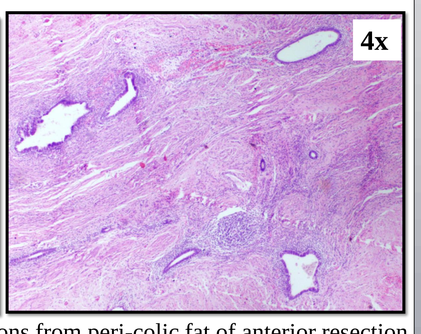


Ovarian like stroma (marked with star) beneath the glands

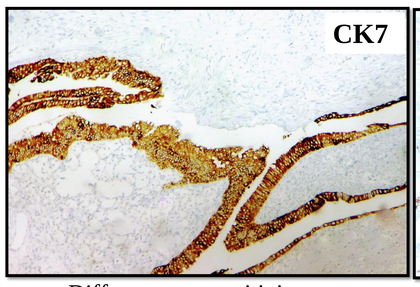


Glands lined by atypical mucinous cells





Sections from peri-colic fat of anterior resection and omental adhesions showing endometriosis



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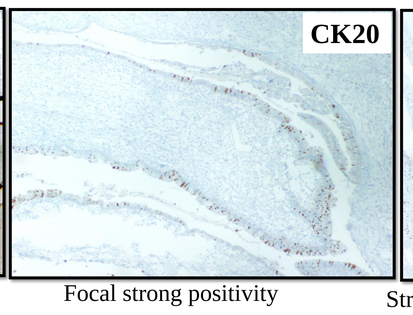

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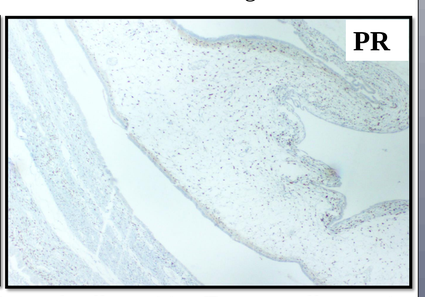

Stromal cells positive,Tumour cells negative

- DIAGNOSIS (2021) : Recurrent Borderline Mucinous Tumour ovary with tumour extending from serosa through wall of colon, forming an intraluminal polypoid growth. Pericolic fat and anterior resection specimen showing Endometriosis.

References :

1. Atlas of Gynecologic Surgical pathology. Fourth ed. China: Elsevier; 2019. 14,Surface Epithelial-stromal tumours; p 427- 463
2. Recurrent intestinal mucinous borderline tumors of the ovary: a report of 5 cases causing problems in diagnosis, including distinction from mucinous carcinoma. International Journal of Gynecological Pathology : Official Journal of the International Society of Gynecological Pathologists, 01 Mar 2014, 33(2):156-165.