A CASE REPORT: POSTMENOPAUSAL DEEP INFILTRATING ENDOMETRIOSIS MIMICKING A RECTOSIGMOID CANCER

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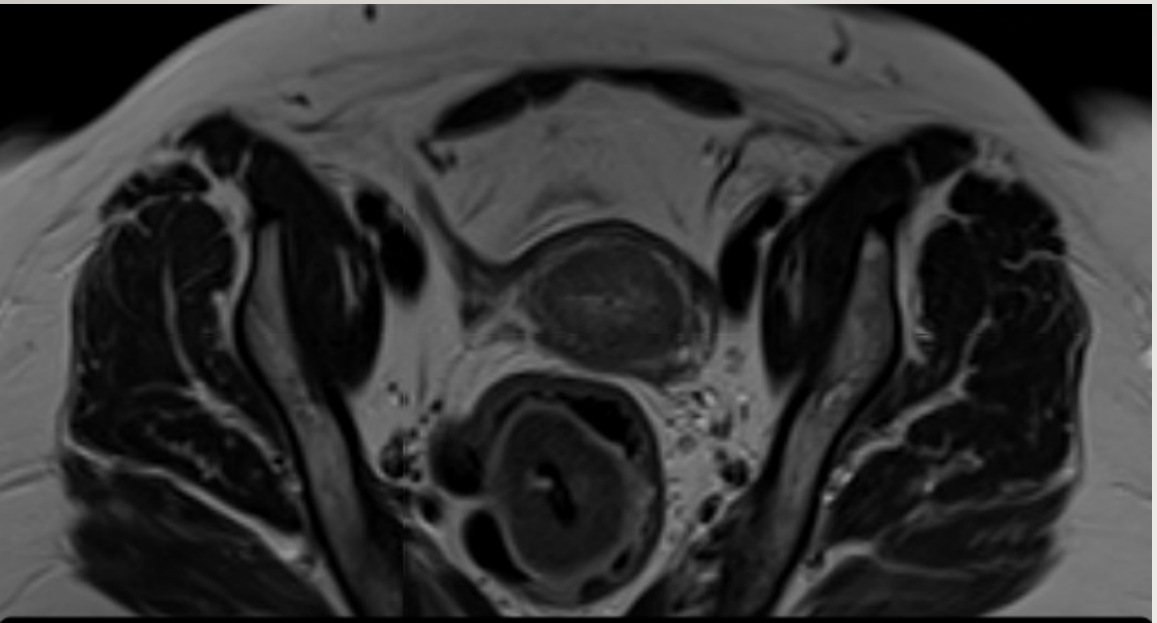
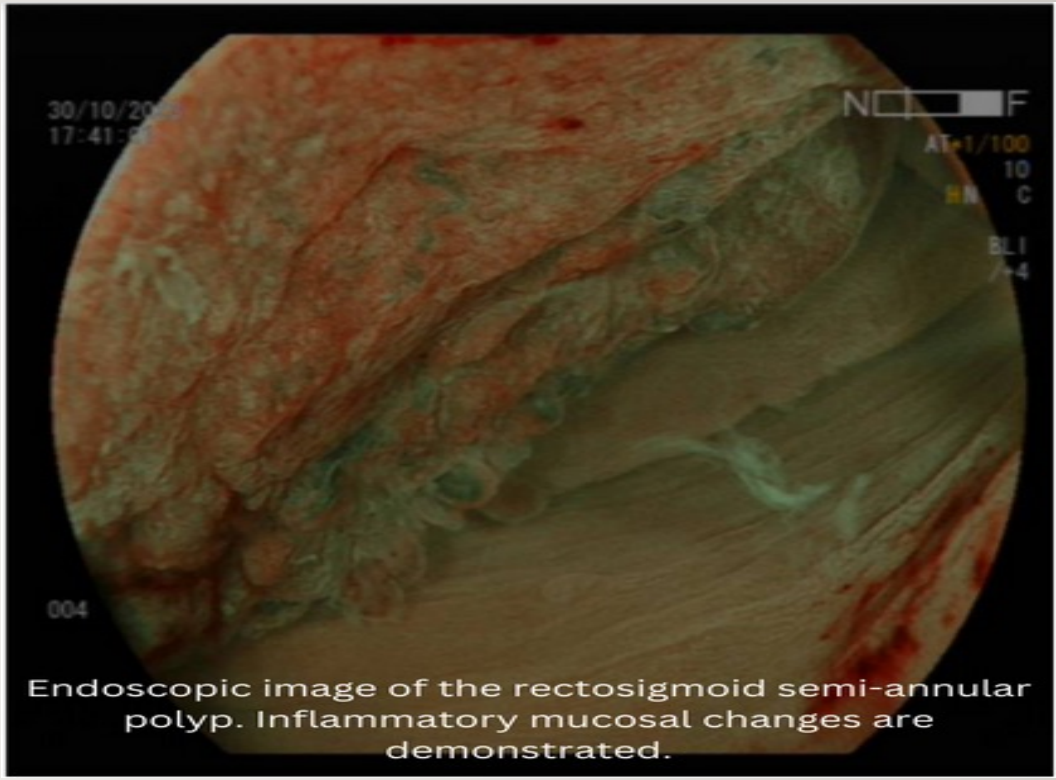
CASE SYNOPSIS

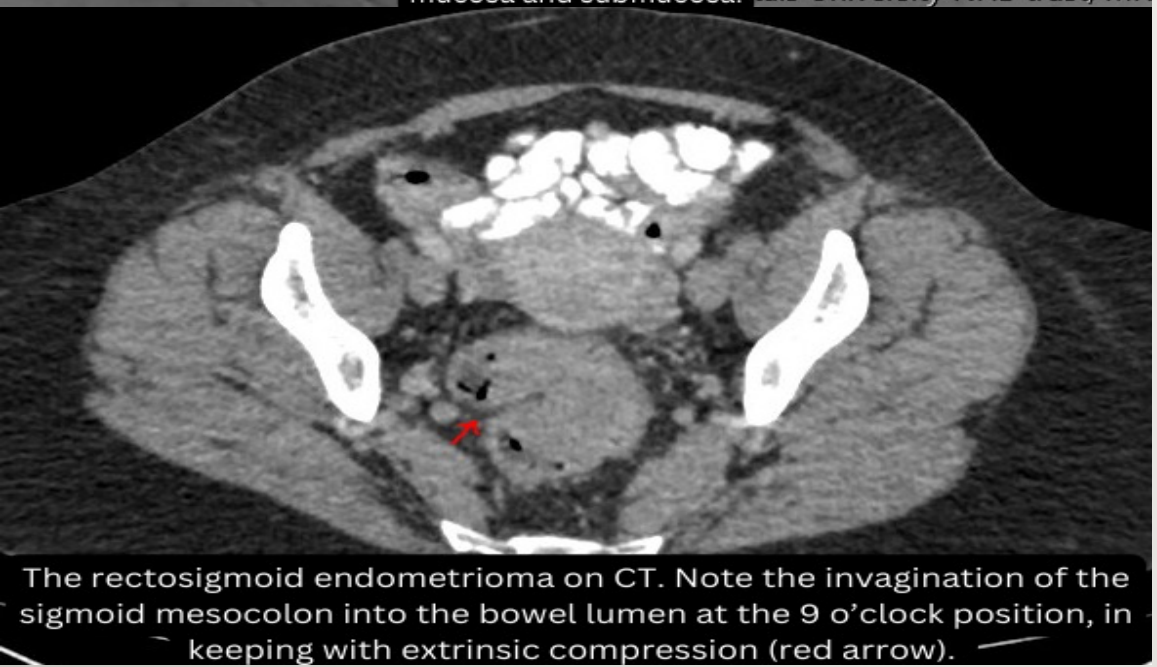
- We present a case involving a **52-year-old** female who had been having bowel functional symptoms which led to referral on the colorectal 2-week-wait pathway. No other symptoms were reported.
- She underwent multiple **flexible sigmoidoscopies**, revealing a polypoidal mass in the distal sigmoid that led to stricturing and luminal narrowing with inconclusive endoscopic appearances.
- **Histopathological** analyses of multiple specimens exclusively showed inflammatory and hyperplastic changes, devoid of any dysplasia or malignancy evidence.
- **Rectal MRI** (rectal cancer protocol) showed a 5cm polypoid mass located at the rectosigmoid junction with an invasive border at the 9 o'clock position, extending 15mm into the peritoneal reflection.
- **PET scan** demonstrated a rectosigmoid mass with low-grade uptake, falling within the lower spectrum of physiological uptake observed in normal bowel.
- A retrospective review of the rectal MRI and PET scans raised the possibility of deep infiltrating endometriosis given the **‘’mushroom cap”** sign demonstrated on the rectal MR. Consequently, the colorectal multidisciplinary team (MDT) referred the case for gynaecological assessment to confirm rectosigmoid endometriosis.



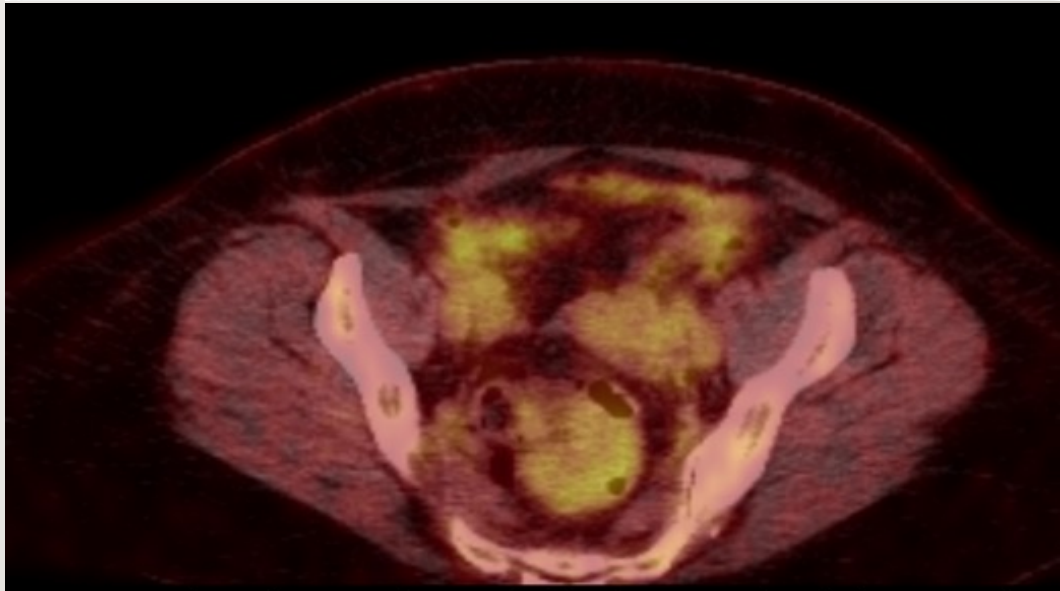
The ‘mushroom cap’ sign on T2 images indicates the submucosal involvement in the rectosigmoid colon endometriosis. The hypertrophic muscularis propria appears as heterogeneous low signal intensity surrounded by the high signal intensity of mucosa and submucosa. als University NHS trust, MR



Endoscopic image of the rectosigmoid semi-annular polyp. Inflammatory mucosal changes are demonstrated.



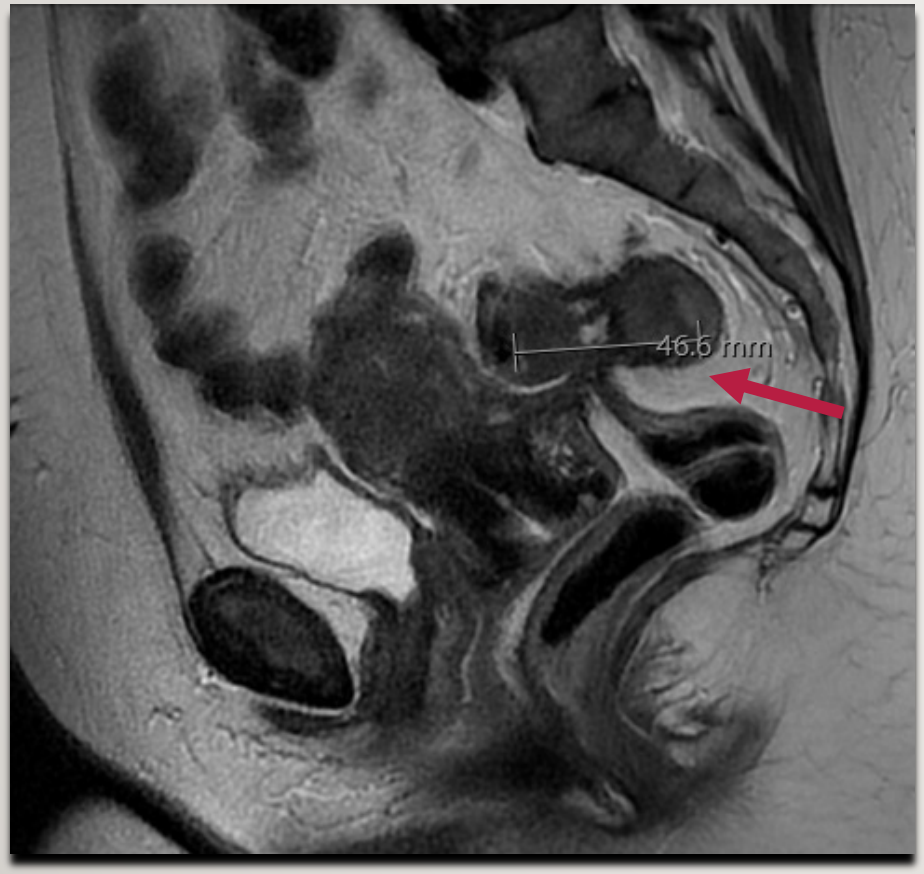
The rectosigmoid endometrioma on CT. Note the invagination of the sigmoid mesocolon into the bowel lumen at the 9 o’clock position, in keeping with extrinsic compression (red arrow).

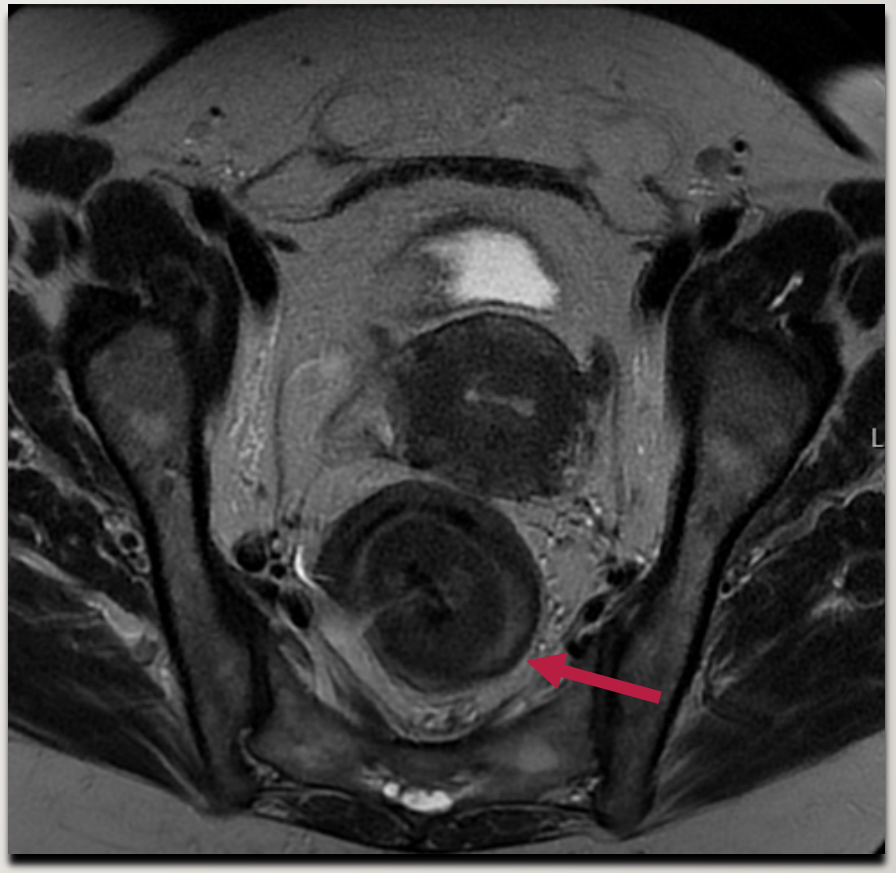


PET scan shows low-grade uptake in the rectosigmoid mass at the lower spectrum of physiological uptake observed in normal bowel

MRI PELVIS (GYNAECOLOGICAL PROTOCOL) SUBSEQUENTLY CONFIRMED:

- There is a 5cm rectosigmoid junction endometriosis which is adherent to the posterior wall of the cervix, in addition to uterine adenomyosis. No ovarian or bladder endometriosis identified. No enlarged lymph nodes.





MANAGEMENT

- The Endometriosis Multidisciplinary Team (MDT) received the patient's referral and later confirmed a diagnosis of **stage IV endometriosis**. The patient was offered the following treatment **options**:

1. **Conservative** approach, with the assumption that symptoms related to endometriosis and adenomyosis might improve post-menopause.
2. **Medical** treatment, such as hormonal suppression for managing endometriosis.
3. **Surgical** intervention, which entails a comprehensive procedure involving total hysterectomy, removal of ovaries, excision of all visible endometriosis, and possibly a joint bowel resection to address the endometriosis.

DISCUSSION

- **Deep infiltrating endometriosis** manifests in premenopausal women and has been described in up to **5%** of the **postmenopausal** women.
- Diagnosis in the latter cohort can be challenging due to the **atypical age** of presentation, particularly when distinguishing it from other entities like colorectal cancer is necessary.
- When interpreting imaging, especially in cases with unfavourable histology or the absence of features indicative of colorectal malignancy, such as local cancer deposits or lymphadenopathy, consideration of infiltrating endometriosis is crucial.
- The **‘mushroom cap'** sign, as discussed in the literature, can be a valuable aid in identifying **deep rectosigmoid endometriosis,** seen on T2 axial or sagittal sequences.

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