An unusual case of sigmoid-uterine fistula

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Background: Colo-uterine fistula is a rare complication that can stem from chronic infection, inflammation, injury or surgery. Here we review literature and present a case where MRI Pelvis revealed a sigmoid-uterine fistula after a patient presented with isolated episodes of faeces in the vagina.

Case: A 75-year-old woman underwent a laparoscopic bilateral salpingo-oopherectomy for an incidental finding of a 13cm ovarian simple cyst on her pelvic ultrasound. This was part of the work-up for her recurrent urinary tract infections. Her co-morbidities included chronic diverticulitis, urinary incontinence post-urethral sling procedure, and stroke with left hemiplegia. Leading up to the surgery, she reported episodes of faecal vaginal discharge. On speculum examination, small amounts of malodorous brown vaginal discharge corresponding to faecal matter was noted. Intraoperatively there was no obvious recto-vaginal fistula found during the EUA and the rectal examination. Hysteroscopy was normal however adhesions may have obscured the view. Her histopathology returned benign. Post-operatively, her MRI Pelvis revealed an abnormal communication between mid-sigmoid colon and posterior serosal surface of the uterine body. The Radiologist advised that this was likely in the setting of severe diverticulosis of the sigmoid colon, and this is the region of previous acute diverticulitis last year. She had a cystoscopy and a colonoscopy which did not reveal a fistula. The patient was referred to the General Surgeons who advised observation of symptoms and conservative management. Follow-up was conducted after three months where the patient reported spontaneous resolution of her symptoms.

Discussion: Sigmoid-uterine fistula is uncommon as the uterus is a thick-walled organ.[1] A review of literature on PubMed revealed less than 30 reported cases of post-diverticulitis colouterine fistulas between 1964 and 2023.[2] Notably, the patients were all above 50 years old. All but three cases received surgical management. Two cases were initially treated conservatively but required surgery after a few months due to ongoing symptoms. The most typical presentation is faecal or purulent vaginal discharge. Less common presentations included abdominal pain and constipation. Other causes aside from diverticulitis include uterine trauma (e.g. curettage, insertion of intrauterine devices), pelvic inflammatory disease, abscess rupture into bowel and uterus, uterine or sigmoid carcinoma, and radiotherapy. For symptomatic cases, a two-stage procedure is usually recommended which involves resection and end colostomy, followed by reanastomosis.[1]

References:

1. Aggarwal R, Indiran V, Maduraimuthu P. Different etiologies of an unusual disease: Colouterine fistula - Report of two cases. Indian J Radiol Imaging. 2018 Jan-Mar;28(1):37-40. doi: 10.4103/ijri.IJRI_172_17. PMID: 29692524; PMCID: PMC5894316.
2. PubMed 2024, *National Library of Medicine National Center of Biotechnology Information website*, accessed 7 March 2024, <https://pubmed.ncbi.nlm.nih.gov/?term=sigmoid%20uterine%20fistula%20diverticulitis>.