Non-Hodgkin Lymphoma of the Female Genital Tract: A Diagnostic Challenge of a Pelvic Mass

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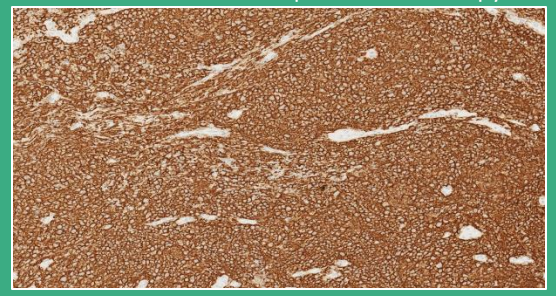
Case

53yo P0, 6-month history of low-grade pelvic pain and constitutional symptoms.

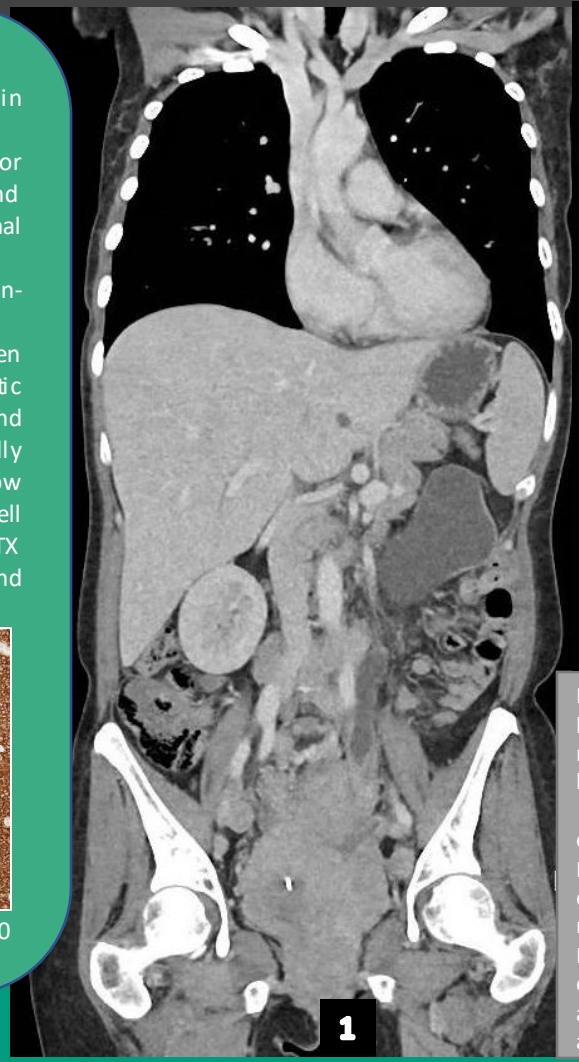
Medical history included 3x laparoscopies for excision of endometriosis, LLETZ for CIN3 and Mirena. Referral bloods: hypercalcaemia, normal serum LDH, normal Ca 125, 19-9 and CEA.

CT guided biopsy + 3x Tru cut biopsies all non-diagnostic.

Concern for haematological malignancy given imaging and lymphoid cells on biopsy. Diagnostic laparoscopy, left salpingectomy, ovarian and omental biopsy; left ovarian biopsy eventually diagnostic with histopathology and flow cytometry confirming diffuse large B cell lymphoma (DLBCL). Received R-CHOP + R-HDMTX under haematology with complete response and recurrence free 3 months post chemotherapy.



High power view of ovarian biopsy showing CD20 +ve B cells in a sheet-like pattern seen in DLBCL



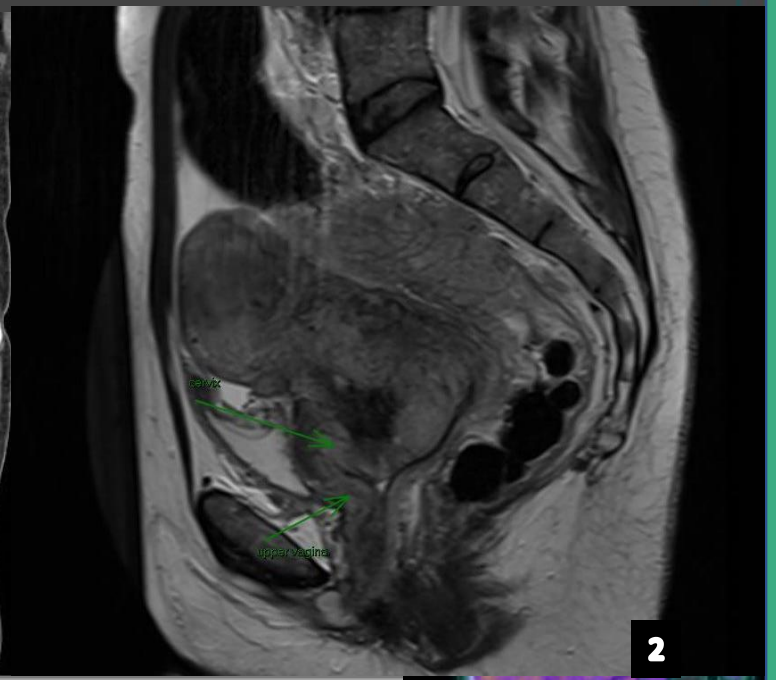
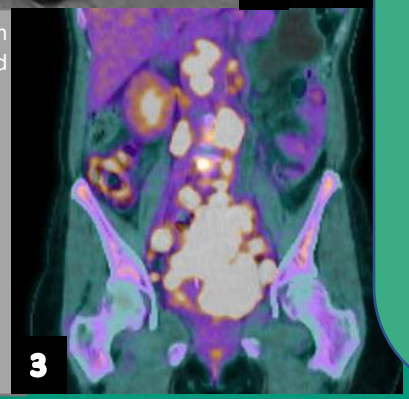


Fig 1:. CT NCAP: large 13 x 8cm mass in lower pelvis, confluent with uterus and rectum, surrounding left ureter and left kidney.

Fig 2: MRI pelvis similar to CT, signal characteristics more consistent with DIE, unable to distinguish between endometriosis or inflammatory or malignant process .

Fig 3: PET: intensively FDG avid, extensive lymphadenopathy in pelvis, again unable to distinguish between active inflammation vs malignancy.



Discussion

- Malignant lymphomas of female genital tract (FGT) are rare, primary non-Hodgkin lymphoma of FGT represents 1.5% of all NHL; DLBCL most common form of NHL of ovary[1,4]
- Lymphoma of FGT accounts for 0.5% of gynaecological malignancy – but may be underdiagnosed[5]
- Ovaries are most commonly affected in primary gynaecological lymphoma[3,5]
- Primary vs secondary gynaecological factor important to distinguish for prognostic reasons[4,5]
- Timely diagnosis remains challenging due to non-specific presenting symptoms; E.g.: vaginal bleeding, abdominal pain, often no constitutional symptoms
- Core biopsies are often non-diagnostic with diagnosis often made after surgical excision for presumed gynaecological malignancy[3]
- Gold standard treatment for NHL involves chemotherapy +/- radiotherapy, with no role for surgical excision[3]
- Prognosis and overall survival for extra-nodal lymphoma is 80%, no literature on survival specifically for primary lymphoma of FGT[4]
- This case highlights the importance of recognition of lymphoma as a differential diagnosis to ensure timely diagnosis and treatment and avoid unnecessary morbid surgery

Ref:
(1) Onyiuke et al, Am J Roentgenol 2013; 201:648-655
(2) Shankland et al, Lancet, 2012; 380: 848-857
(3) Mandato et al, Anticancer Res, 2014; 34:4377-90
(4) Bhartiya et al, J Clin Diagn Res, 2016; 10: 10-11
(5) Kosari et al, Am J Surg Pathol, 2005; 29: 1512-1520

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