

# SQUAMOUS CELL CARCINOMA ARISING FROM MATURE OVARIAN TERATOM-THE ROLE OF MALIGNANCY ASSESSMENT TOOLS

## Introduction

Malignant transformation arising from an ovarian dermoid cyst is a rare occurrence, although some studies have reported rates of up to 1-2%. SCC is the most frequent malignancy arising from **mature teratomas** (80%)<sup>3,5</sup>

Differentiation between malignant & benign ovarian mass can be difficult preoperatively both radiologically and biochemically. The mean survival time with ovarian malignancy is significantly improved when managed within a specialised gynaecological oncology service<sup>1</sup>.

## Case report

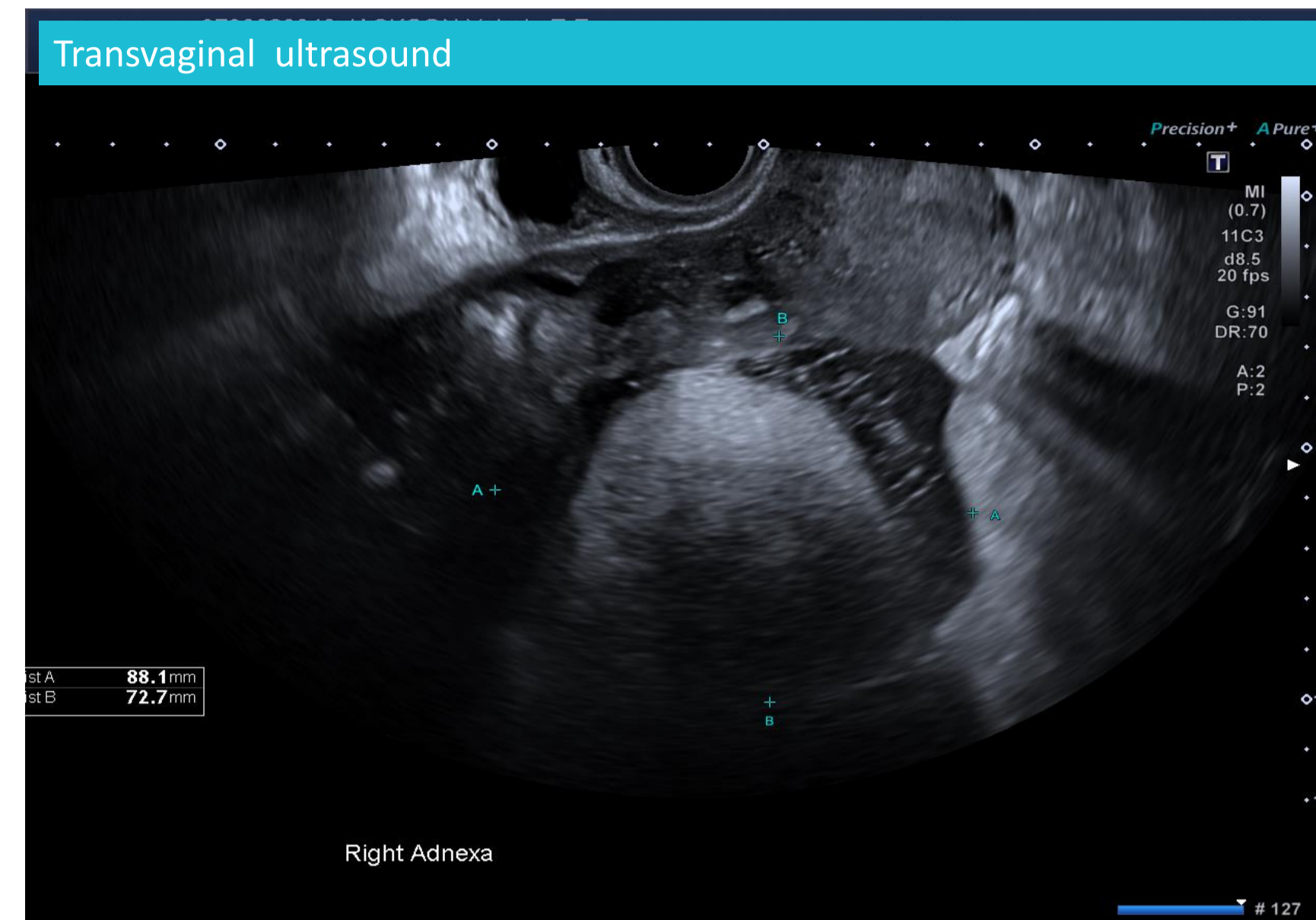
49y/o PO, h/o pelvic pain, bloody PV discharge, and recent fatigue.

O/E: Soft abdomen with fullness in RIF

**Preliminary investigations:** microcytic anaemia, raised CEA (9) with normal CA125 (32).

## Imaging

- **TVUSS abdo/pelvis: (See image)**  
Heterogeneous complex soft tissue mass in right adnexa 9X7CM. No ascites.
- **CT scan abdo/pelvis:** Right adnexal mass 9.9x10x9cm posterior to uterus **pathognomonic** of ovarian teratoma. No evidence of lymphadenopathy. No ascites.



## Initial Management

- Surgical referral and normal colonoscopy
- Gynae oncology MDM discussion.
- Proceeded to laparoscopic BSO+adhesiolysis.
- **Intraop findings:** Right adnexal mass adherent to uterus -appearance suspicious of ruptured dermoid cyst with chemical peritonitis. Fixed right ureter.

## Further Management

### -HISTOPATHOLOGY

### STAGE 11B SCC WITHIN DERMOID CYST

-Referred to gynae oncology Belfast and palliative care team.

-Subsequent CT&MRI showed locally invasive disease-Proceeded to completion & debulking surgery:**TAH/recto-sigmoid colectomy/partial caecal resection/Appendicetomy/R ureter & bladder cuff resection+ R ureteric stenting.**

- Post op complications: bladder injury, VVF & protracted recovery period.
- Patient subsequently died under palliative care 7 months after diagnosis.

## Discussion & Conclusion

In considering the management of women with ovarian teratomas a detailed medical history & examination is required to identify sinister features. Management should be guided by:

1. The size of the tumour  $\geq 10$ cm being significant<sup>2,3</sup>
2. Patient's age at diagnosis- 45yrs  $\uparrow$  suspicion<sup>3</sup>
3.  $\uparrow$  CEA in absence of bowel pathology consider SSC antigen testing<sup>2,3</sup>.

A high index of suspicion of malignancy remains essential when considering the results of any diagnostic test.

## References

1. RCOG Green-top Guideline No. 62- RCOG/BSGE Joint Guideline | November 2011.
2. S. Maharjan; Mature cystic teratoma of ovary with squamous cell carcinoma arising from it: Clinical case reports: Volume 7, Issue 4 April 2019, Pages 668-671.
3. F Kikkawa et al; Diagnosis of squamous cell carcinoma arising from mature cystic teratoma of the ovary; Cancer 1998 Jun 1; 82(11):2249-55. (PubMed article).
4. Hackett et al; Squamous-cell carcinoma in mature cystic teratoma of the ovary: systematic review and analysis of published data, The Lancet oncology: Volume 9, issue 12, P1173-1180, December 01, 2008