



Metastasis of Epithelial Ovarian Cancer to the Abdominal wall

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Background

- Ovarian cancer metastasizes to the anterior abdominal wall by cancer cell implantation or by direct invasion.
- Women develop abdominal wall metastases (AWM), secondary to surgery or abdominal wall puncture and are staged as FIGO IVB^[1].

Aim

- The aim of this study was to assess the incidence, the risk factors, clinic-pathologic profile and surgical outcome of abdominal wall metastases (AWM) in patients with epithelial ovarian cancer.

Methods

- This retrospective study was conducted in the department of Gynaecologic Oncology, CMC, and included women who were treated for epithelial ovarian cancer with AWM from September 2022 to August 2024.
- Women with AWM in whom surgery was not attempted were excluded from the study. Analysis was done with SPSS.

Results

- The incidence of AWM in EOC was found to be 5.9% (21/354). Three (16%) were excluded as they were not operated.
- The most common histopathology was high grade serous carcinoma (8/18, 44%)
- AWM as the only site of extra-abdominal metastasis was observed in 15 (15/18, 83%).
- Preceding invasive intervention was observed in 12 (66%) of the women with AWM, the most common procedure being FNAC/ biopsy and paracentesis.
- AWM as the only site of disease (clear cell histology), arising from the tubal ligation scar was found in one patient

Table 1: Patient characteristics

Patient characteristics	N=18
AWM presentation	
• Upfront setting	14 (77%)
• Recurrent disease	4 (22%)
Histopathology	
• High grade serous	8 (44%)
• Low grade serous	4 (22%)
• Carcinosarcoma	3 (16%)
• Clear cell	2 (11%)
• Mucinous	1 (5%)
BRCA status	
• Unknown	10 (55%)
• Negative	5 (27%)
• Positive	2 (11%)
• VUS	1 (5%)
Extra-abdominal metastasis	3 (16%)
• Lungs	1 (5%)
• Cardio-phrenic nodes	2 (11%)
Preceding intervention	
• Paracentesis/ FNAC	6 (33%)
• Laparotomy	5 (27%)
• Laparoscopy	1 (5%)
Mean CA125 U/mL	1434 (5-16119)

References

- 1) Berek JS, Renz M, Kehoe S, Kumar L and Friedlander M: Cancer of the ovary, fallopian tube, and peritoneum: 2021 update. Int J Gynaecol Obstet. 155 (Suppl 1):S61–S85. 2021.
- 2) Ataseven B, du Bois A, Harter P, et al Impact of Abdominal Wall Metastases on Prognosis in Epithelial Ovarian Cancer International Journal of Gynecologic Cancer 2016;26:1594-1600.

Table 2: Tumour characteristics

Parameters	N=18
Site of AWM	
• Laparotomy site	5 (33%)
• Paracentesis/ FNAC site	6 (22%)
• Laparoscopy post site	1 (5%)
Size of AWM	
• <2cm	8 (44%)
• 2-5cm	5 (27%)
• >5cm	5 (27%)
Cytoreduction	
• Primary	6 (33%)
• Interval cytoreduction	7 (38%)
• Secondary	2 (11%)
• Not operable	3 (16%)
Ascites	
• Absent	5 (27%)
• Mild- moderate	10 (55%)
• Gross	3 (16%)
PCI score	
• <6	6 (33%)
• 6-14	5 (27%)
• ≥15	7 (38%)
Omental caking present	6 (33%)
Cytoreduction	
• Complete	12 (66%)
• Residual disease	6 (33%)
Abdominal wall repair with flap/mesh	2 (11%)



Fig-1 showing AWM in low grade serous carcinoma ovary at laparotomy scar site and the paracentesis site. Patient had extensive disease and could not be debulked, started on hormonal therapy

Fig-2 showing AWM in a women with recurrent ovarian mucinous carcinoma. Complete secondary cytoreduction was done.

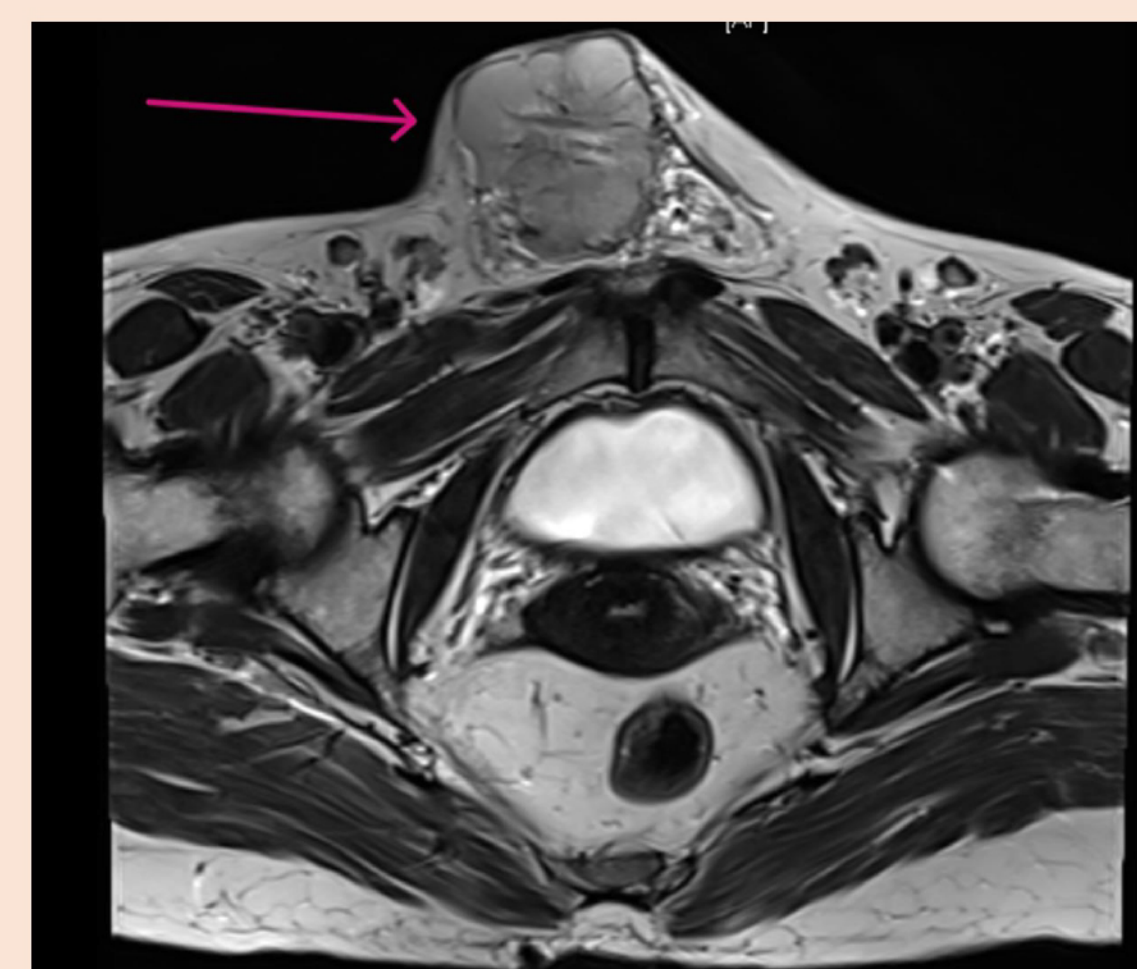
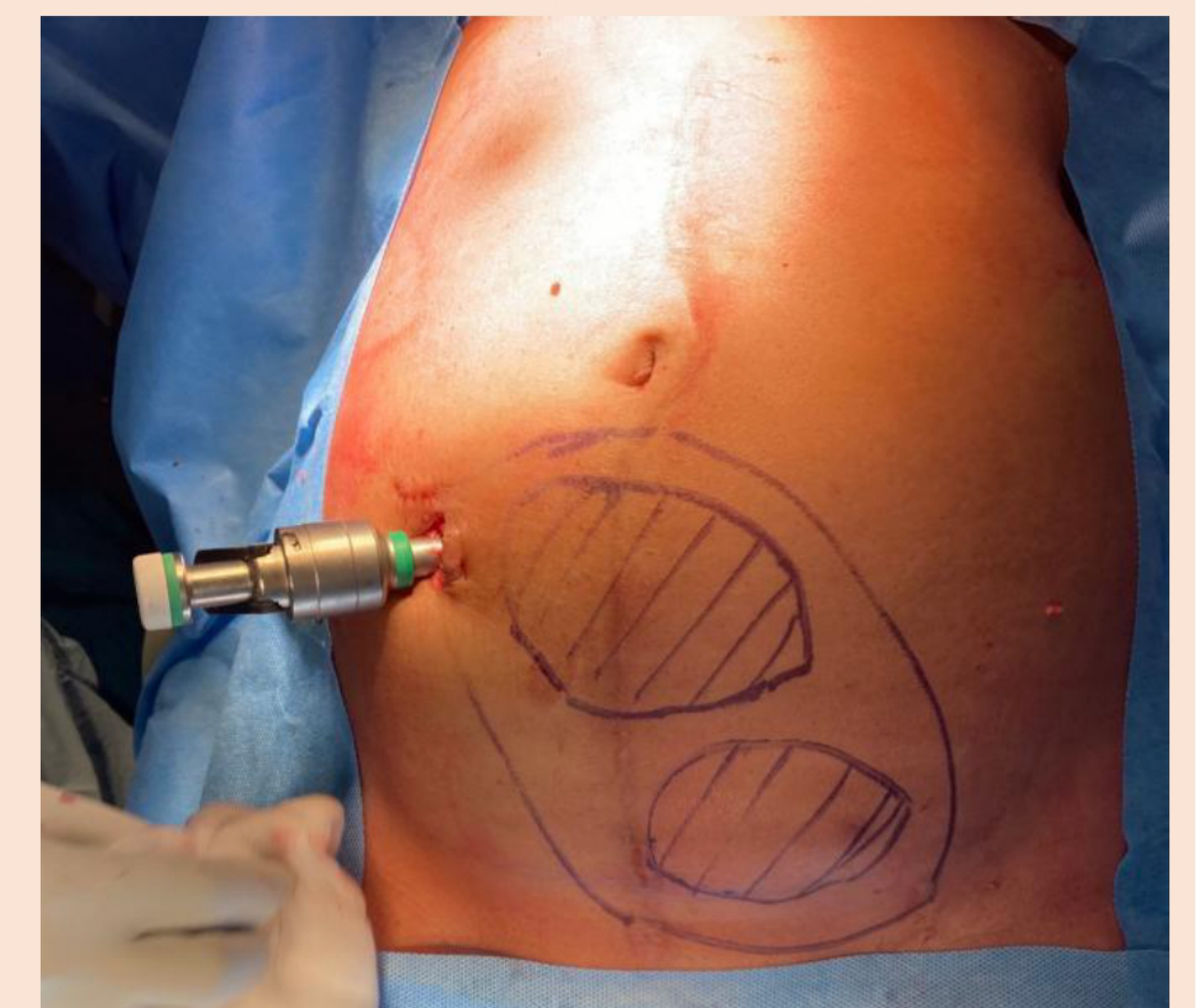


Fig-3 showing MRI image of AWM in a patient with clear cell ovarian carcinoma. Primary cytoreduction was done

Discussion

- In a study done in Germany and Austria, 87.2% of the patients with AWM had received a preceding interventional procedure^[2].
- Higher complete cytoreduction rates were observed in AWM unless associated with extensive tumour burden^[2].

Conclusion

- EOC with AWM upstaging to stage IV-B is often secondary to an iatrogenic intervention.
- In the absence of preceding intervention, AWM is associated with aggressive tumour biology, increased incidence of BRCA mutation and high tumour volume.
- As AWM is usually resectable, complete cytoreduction should be attempted which might require additional procedures.