



OVARIAN SEROUS CYSTADENOCARCINOMA : A CASE SERIES



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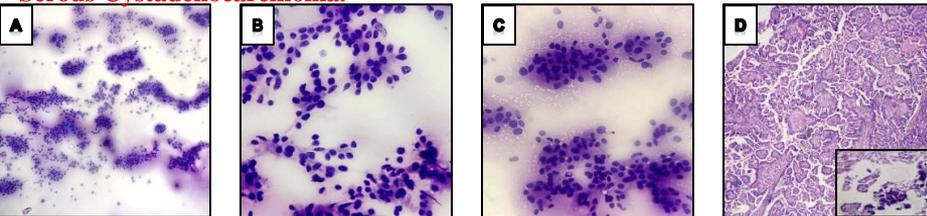
BACKGROUND

- ◆ Ovarian serous tumors account for about one fourth of all ovarian malignancies.
- ◆ These are divided into high grade and low grade serous types with both carrying different origin and prognosis.

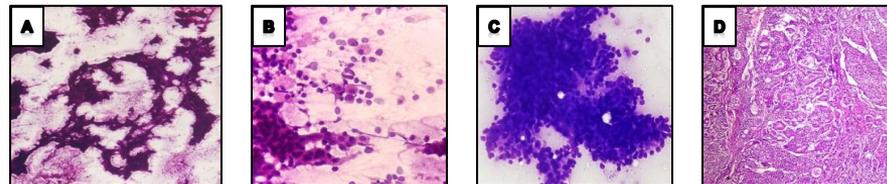
CASE HISTORY

Case 1 – A 45 year old female presented with a right ovarian mass. Ultrasound guided FNA showed clusters of tumor cells arranged in papilleroïd pattern exhibiting mild nuclear atypia, increased N:C ratio, 1-2 prominent nucleoli with condensed chromatin and scant cytoplasm. Findings were suspicious of papillary cystadenocarcinoma which was confirmed on HPE to be a **Low Grade Serous Cystadenocarcinoma**.

Case 2 – A 85 year old female presented with a left ovarian mass. Ultrasound guided FNA showed tumor cells displaying moderate degree of atypia, irregular nuclear contour, increased N:C ratio, vesicular to hyperchromatic nuclei with occasional cells showed intranuclear cytoplasmic vacuolation as well. Findings were suspicious of papillary cystadenocarcinoma which was confirmed on HPE to be a **High Grade Serous Cystadenocarcinoma**.



CASE 1 : Low Grade Serous Cystadenocarcinoma **Figure (A)** FNA showing moderately cellular smears (LG X10) **Figure (B)** showing tumour cells with mild nuclear atypia arranged in papilleroïd pattern (LG x 40) **Figure (C)** showing another area of mild nuclear atypia (LG X 40) **Figure (D)** Histopathological examination showing tumor cells arranged in papillary pattern; **Inset** showing Psammoma bodies (H & E x 10)



CASE 2 : High Grade Serous Cystadenocarcinoma **Figure (A)** FNA showing hypercellular smears (H & E x 10) **Figure (B)** showing moderate nuclear atypia with ropy background (H & E x 40) **Figure (C)** showing dense overlapping of nuclei (LG x 40) **Figure (D)** Histopathological examination revealing sheets of tumor cells displaying moderate atypia

DISCUSSION

- ◆ Ovarian serous cystadenocarcinoma is the malignant form of ovarian serous tumor, and is the most common type of ovarian malignancy.
- ◆ Based on degree of atypia and mitotic activity, it is divided into low grade and high grade. Their molecular pathways also differ.
- ◆ Low grade ones show association with serous borderline tumours and are generally cured by surgical resection alone.
- ◆ High grade tumours are said to arise from a precursor lesions in fallopian tube referred to as Serous Tubal Intraepithelial Carcinoma (STIC) and always require ancillary treatment.

CONCLUSION

Papillary cystadenocarcinomas can be diagnosed reliably on cytology. However, attempt to classify them as low grade or high grade should always be made on morphology as well as by cytogenetics as both these entities carry vastly different clinical behaviour.

REFERENCES

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- 2) Ayhan A, Kurman RJ, Vang R, Logani S, Seidman JD, Shih IM. Defining the cut-point between low-and high grade ovarian serous carcinomas: a clinicopathologic and molecular genetic analysis. *The American journal of surgical pathology*. 2009 Aug;33(8):1220.