Interesting Case Presentation

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This case was provided by: GynaePath – Douglass Hanly Moir Pathology, Sydney, Australia.
Patient History

- 37-year-old female
- Reporting abdominal discomfort and bloating
- LMP 2 weeks ago
- Normal appearing cervix
- Conventional Pap smear and ThinPrep® Pap Test collected
Conventional Slide

Blood and inflammation
ThinPrep® Pap Test

Hyperchromatic crowded groups

10x
ThinPrep® Pap Test

3-Dimensional groups
ThinPrep® Pap Test

Eccentrically placed nuclei

40x
ThinPrep® Pap Test

Papillary-like projections

40x
ThinPrep® Pap Test

Finely granular cytoplasm

40x
ThinPrep® Pap Test

Cytoplasmic vacuolization

40x
ThinPrep® Pap Test

Granular chromatin

40x
ThinPrep® Pap Test

Variation in nuclear shape & size
ThinPrep Pap Test

Background clingy diathesis
ThinPrep® Pap Test

Prominent nucleoli and scalloped edges
Ancillary testing from the Vial

Residual material:

- Agar cell bock from ThinPrep vial
- H&E section
- 14 Immunocytochemistry Panel
Cell Block from the ThinPrep® Vial
Immunocytochemistry CA-125

Membranous staining
Final Cytology Diagnosis

- Adenocarcinoma

- Strong membranous staining of the tumour cells are suggestive of a tumour
  - Ovarian (most likely)
  - Biliary duct and breast (can not be excluded)
  - Clinical and Radiological correlation is recommended

Cell block and Immunohistochemical stains

- Positive: CA125 CK7, CK19

- Negative: PAX8, CK20, p53, p16, ER & PR, AMACR, NAPSIN A, HNF 1B, CDX 2, GATA3, P63

- The cell block shows multiple groups and clusters of malignant cells with high nuclear to cytoplasmic ratio, pleomorphic nuclei and prominent nucleoli

- The features are consistent with an adenocarcinoma
Patient follow up

Investigative tests were ordered for lower pelvic discomfort, abdominal distention and Sister Mary Joseph’s nodule:

- Pelvis U/S - Showed an ascites
- CT Scan
- Referral to a Gynaecologist

Treatment:

- Radical hysterectomy - Stage IV High Grade Ovarian Ca
- Rectosigmoid resection
- Peritonectomy
- Chemotherapy

Example of Sister Mary Joseph’s nodule

1. http://bjgp.org/content/63/615/551