Case Review

Case: TE1-21

Microscopy:

The sections show fibrofatty breast tissue with appearance in keeping with gynaecomastia with fibrocellular stroma, and scattered benign ducts with acini. Much of the connective tissue contains interspersed slit-like spaces which appear lined by bland spindle cells and the features indicate pseudoangiomatous hyperplasia (PASH). There is no abnormal epithelial proliferation, no carcinoma in situ and no malignancy.

Preferred Diagnosis:

Gynaecomastia with psuedoangiomatous stromal hyperplasia (PASH).

Case: TE1-22

Microscopy:

The sections show large numbers of chorionic villi. Many are normal and others appear immature swollen and oedematous with rounded lobulated outlines, infoldings, some cisterns and regular stromal inclusion formation with some trophoblast proliferation. There are also separate foci of focal patchy trophoblast proliferation but no obvious trophoblast atypia. Some normal appearing villi are present. Some villous vessels are present and these are shows to contain nucleated fetal erythrocytes. The features indicate products of conception with hydropic atypical chorionic villi. Partial hydatidiform mole cannot be excluded on morphology alone.

Comment:

Ploidy studies will be performed and a supplementary report will be issued between 4 to 6 weeks.

Preferred Diagnosis:

Atypical chorionic villi. Ploidy studies will be performed and a supplementary report will be issued between 4 to 6 weeks.

Differential diagnoses:

1. Partial hydatidiform mole.
2. Atypical hydropic chorionic villi.

Comment:

The overall morphological features are suspicious of partial hydatiform mole.

A p57 immunoperoxidase stain should show positive staining in the villous stromal cells and cytotrophoblast in both the above entities.

However, ploidy studies should show TRIPLOID products of conception in partial mole, but if ploidy studies are DIPLOID, then the final preferred diagnosis is Hydropic products of conception.

Case: TE1-23

Microscopy:

The sections show irregular tissue with a biphasic appearance composed of basaloid germinative cells with scanty cytoplasm and hyperchromatic nuclei with scattered mitoses and eosinophilic ghosted or shadow cells with abundant cytoplasm. The lesion extends to resection margins. There is no evidence of malignancy..

Preferred Diagnosis:

Pilomatrixoma.

Case: TE1-24

Microscopy:

The sections show respiratory airway containing a tumour focally infiltrating the cartilage and the surrounding parenchyma. The tumour is composed of cribriform nests and back to back glands lined by mildly atypical epithelial cells with oval nuclei and finely granular chromatin with inconspicuous nucleoli. There is no necrosis and mitoses are extremely rare (approximately 1 per 50 high power fields). The features indicate carcinoid tumour. There is a focus of tumour extending to the inked edge in this section. There is no intra-lymphatic, or small vessel space invasion and no evidence of malignancy in the two lymph nodes present.

Preferred Diagnosis:

Carcinoid tumour

Comment:

Immunoperoxidase stains would be confirmatory, such as CD56, synaptophysin, chromogranin and NSE.

Case: TE1-25

Microscopy:

The sections show hyperplastic synovium with brown and occasionally yellow granules. Within the subsynovial connective tissue are bland mononuclear cells as well as scattered basophilic calcifications and occasional multinucleated giant cells but these are not present in sheets as seen in pigmented villonodular synovitis. The features best indicate haemosiderotic synovitis.

Preferred Diagnosis:

Haemosiderotic synovitis (see comment)

Comment:

A Perl's stain should confirm the presence of iron.

The overall features are suggestive of haemosiderotic synovitis.

However, I do consider pigmented villonodular synovitis so I would request a CD68 immunoperoxidase stain to confirm that many of these cells are histriocytes in keeping with haemosiderotic synovitis.