

South East England General Histopathology EQA Scheme



7808

Round k Final Case Analyses

Cases 756 to 767

Circulated
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143 responses (90.51%)

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Authorised by:

Prof J Schofield

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With thanks to those who contributed to this round:

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Case Number: 756

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Diagnostic category: GI

Clinical : M45. Small bowel lesion, incidental finding ? Lymphoid.

Specimen : Small bowel

Macro : A portion of small bowel measuring 30mm x 25mm x 7mm. There is a vaguely flattened area on the mucosal surface measuring 12 x 12mm. On slicing there is a yellow rounded nodular area in the submucosa measuring 19 x 12mm.

	Final Merges	Score
1	Heterotopic pancreas	9.86
2	NE Tumour / carcinoid. Malignant	0.07
3	Meckel's diverticulum	0.07

Most popular diagnosis: Heterotopic pancreas

Reported Diagnosis: Heterotopic pancreas

Case Number: 757

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Diagnostic category: GU

Clinical : M29. Left inguinal orchidectomy.

Specimen : Testis

Macro : A testis with a short stump of spermatic cord 50mm in length with a cross-section of 21x13mm. The attached testicle including adnexa measures 48x32x22mm. Slicing reveals a shrunken, homogenous testis measuring 28x15x16mm

Relevant information on special stains/immunohistochemistry:

Tubules contain vimentin-positive cells only.

	Final Merges	Score
1	Klinefelters	0.07
2	Atrophy with increased Sertoli Cells	9.62
8	Other benign sertoli cells lesion	0.01
9	??IGCN (with atrophy & spermatocytic arrest).	0.15
10	N/A I do not report testis (exemption not on file)	0.15

Most popular diagnosis: Atrophy with increased Sertoli Cells

Reported Diagnosis: Sertoli cell only syndrome, consistent with undescended testis (history only revealed later)

Case Number: 758

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Diagnostic category: Endocrine

Clinical : F57. Previous radioiodine for thyrotoxicosis. Primary hyperparathyroidism. Very large parathyroid

Specimen : Parathyroid

Macro : 30mm tan/brown nodule with focal calcification.

	Final Merges	Score
1	Parathyroid adenoma	9.43
2	Parathyroid adenoma suspicious of carcinoma	0.07
3	Parathyroid hyperplasia	0.29
4	Parathyroid carcinoma	0.14
5	Parathyroid neoplasm	0.07

Most popular diagnosis: Parathyroid adenoma

Reported Diagnosis: Parathyroid adenoma

Case Number: 760

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Diagnostic category: Respiratory

Clinical : F64. Right lung (RLL) biopsy. ?Primary ?met.

Specimen : Right Lung

Macro : Three thin cores up to 15mm plus fragments

	Final Merges	Score
1	SCC NOS	9.40
2	Neuroendocrine carcinoma	0.11
3	Adenosquamous carcinoma	0.18
5	Adenoid cystic carcinoma	0.04
6	TCC	0.04
7	Carcinoma ? origin	0.07
8	Thymic carcinoma	0.02
9	Mucoepidermoid carcinoma	0.14

Most popular diagnosis: SCC NOS

Reported Diagnosis: Basaloid squamous cell carcinoma

Case Number: 761

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Diagnostic category: Skin

Clinical : M65. ?Enlarging haemangioma right buttock. Present years, growing recently.

Specimen : Skin excision

Macro : An ellipse of skin measuring 20 x 13mm and excised to a depth of 6mm. On the surface there is a slightly raised, irregular lesion covering an area of up to 6mm in maximum dimension. Transverse sections through lesion.

Relevant information on special stains/immunohistochemistry:

Positive for S100, Melan A and HMB45. Ki67 less than 3%

	Final Merges	Score
1	Malignant melanoma	1.03
2	Deep penetrating / Blue / Cellular / benign naevus	8.62
4	Clear cell sarcoma	0.35

Most popular diagnosis: Deep penetrating / Blue / Cellular / benign naevus

Reported Diagnosis: benign cellular blue naevus

Case Number: 762

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Diagnostic category: Breast

Clinical : F81. Right breast lump. Wide local excision. Sentinel lymph nodes negative on OSNA.

Specimen : Breast

Macro : Breast tissue (60 x 42 x 35mm) containing as well-defined white tumour (12mm in diameter).

	Final Merges	Score
1	Adenoid cystic carcinoma	9.86
2	Adenomyoepithelioma	0.07
3	Cribriform carcinoma	0.07

Most popular diagnosis: Adenoid cystic carcinoma

Reported Diagnosis: Adenoid cystic carcinoma of the breast.

Case Number: 763

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Diagnostic category: Gynae

Clinical : F25. Left Bartholin's cyst

Specimen : Bartholin's cyst

Macro : Piece of tissue 24 x 12mm and attached tube 40mm.

	Final Merges	Score
1	Bartholins gland/vestibular hyperplasia/adenoma	9.17
3	Lymphangioma	0.20
4	Bartholin duct cyst	0.45
7	Hidradenoma	0.04
8	Benign Bartholins gland & vascular malform / pseudocyst	0.14

Most popular diagnosis: Bartholins gland/vestibular hyperplasia/adenoma

Reported Diagnosis: Benign Bartholin's duct cyst and glandular hyperplasia.

Case Number: 764

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Diagnostic category: Skin

Clinical : M 17 months. Lesion left lower lid ?naevus

Specimen : Skin lesion left lower lid

Macro : Lesion left upper eyelid: Single piece 4mm diameter, depth 3mm, showing a rounded irregular pigmented surface.

	Final Merges	Score
1	(Juvenile) Xanthogranuloma	9.24
2	Chalazion	0.47
3	Xanthoma	0.20
4	Foreign body granuloma	0.07
5	Dermatofibroma	0.01
6	Langerhans cell histiocytosis	0.01

Most popular diagnosis: (Juvenile) Xanthogranuloma

Reported Diagnosis: Juvenile Xanthogranuloma

Case Number: 765

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Diagnostic category: Miscellaneous

Clinical : M69. Widespread peritoneal disease ? Pseudomyoma peritonei.
Omental biopsy.

Specimen : Omental biopsy

Macro : A fragment 52 x 28 x 8mm. Slicing shows indistinct pale firm areas.

Relevant information on special stains/immunohistochemistry:

Positive staining for calretinin, WT1 with cytoplasmic and membranous staining for EMA. There is negative staining for BerEp4, MOC31, CK20, PAX8, AMACR and CD117. Negative staining for desmin. CD10 focal positive staining and focal staining for RCC.

	Final Merges	Score
1	Mesothelioma	9.57
2	Metastatic RCC	0.22
3	Metastatic adrenal cortical carcinoma	0.07
4	Mesothelioma and RCC	0.14

Most popular diagnosis: Mesothelioma

Reported Diagnosis: Epithelioid Malignant Mesothelioma.

EDUCATIONAL CASE

Case Number: 766

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Diagnostic category: Educational

Clinical : M83. New bladder tumour - papillary, 4cm.

Specimen : Bladder

Macro : 21 grams of friable brown tissue; some calcified material is also identified.

Suggested diagnoses:

<ul style="list-style-type: none"> • Sarcomatoid transitional cell carcinoma of bladder • Carcinosarcoma • Transitional cell carcinoma with cartilagenous metaplasia in the stroma • Carcinosarcoma • Carcinosarcoma • High grade urothelial carcinoma within divergent differentiation (metaplastic carcinoma with heterologous component) • Urothelial carcinoma with sarcomatoid differentiation • TCC with carcinosarcoma • High grade Urothelial carcinoma with divergent differentiation (cartilage, bone) • Carcinosarcoma • Sarcomatoid carcinoma with urothelial carcinoma and chondroid osteosarcomatous components. • SARCOMATOID CARCINOMA • Carcinosarcoma (papillary transitional cell carcinoma and chondro/osteosarcoma) • Carcinosarcoma • High grade urothelial carcinoma with chondrosarcomatoid differentiation • Papillary and solid urothelial carcinoma with chondroid stroma. • Carcinosarcoma • TCC with sarcomatoid elements • Carcinosarcoma of the bladder • Metaplastic carcinoma (carcinosarcoma) • Urothelial carcinoma with cartilaginous metaplasia • Transitional cell carcinoma with chondroid metaplasia 	<ul style="list-style-type: none"> • Transitional cell carcinoma with heterologous bone and cartilage • G3 TCC and malignant oestiosarcoma component • Chondroid metaplasia in TCC (grade 2 and 3) • Sarcomatoid variant of urothelial carcinoma • Sarcomatoid TCC • Carcinosarcoma • PAPPILLARY TRANSITIONAL CELL CARCINOMA WITH CHONDROSARCOMATOUS DIFFERENTIATION • Sarcomatoid urothelial cell carcinoma • CARCINOSARCOMA • Carcinosarcoma • Transitional Cell Carcinoma + chondrosarcoma • Urothelial carcinoma with heterologous sarcomatoid differentiation (osteosarcoma and chondrosarcoma) • Sarcomatoid urothelial carcinoma with chondrosarcomatous component • Carcinosarcoma with chondroid differentiation • Carcinosarcoma • Sarcomatoid urothelial carcinoma with chondrosarcomatous differentiation. • Sarcomatoid Urothelial Carcinoma • High grade TCC with sarcomatoid transformation and heterologous elements(chondrosarcomatous areas). • Carcinosarcoma • Carcinosarcoma of the bladder with chondroblastic differentiation • Carcinosarcoma bladder
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<ul style="list-style-type: none"> • Urothelial carcinoma with sarcomatous elements (chondrosarcoma) • TCC WITH CHONDROID METAPLASIA • Sarcomatoid carcinoma • Carcinosarcoma • Low grade TCC with chondroid metaplasia • Urothelial carcinoma with chondrosarcomatous differentiation – carcinosarcoma • Papillary transitional cell carcinoma with sarcomatoid differentiation • Transitional cell carcinoma with sarcomatoid component • Carcinosarcoma – TCC + malignant stroma (inc cartilage) • TCC with areas of sarcomatoid change • Urothelial carcinoma with sarcomatoid differentiation / Carcinosarcoma • Sarcomatoid urothelial carcinoma with chondrosarcomatous component • Carcinosarcoma • Sarcomatoid Urothelial Carcinoma • Grade 3 TCC with sarcomatoid areas with bone and cartilage formation • GRADE 3 PAPILLARY TRANSITIONAL CELL CARCINOMA WITH OSTEOCARTILAGENOUS DIFFERENTIATION (CARCINOSARCOMA) • Papillary transitional cell carcinoma with focal sarcomatoid elements (G3) • Carcinosarcoma • Sarcomatoid urothelial carcinoma (chondrosarcomatous component) • Sarcomatoid carcinoma • Carcinosarcoma/TCC with sarcomatous change • Carcinosarcoma/sarcomatoid urothelial carcinoma • Carcinosarcoma • Urothelial carcinoma with osseous metaplasia • Sarcomatoid carcinoma of the bladder • Sarcomatoid urothelial carcinoma • Sarcomatoid carcinoma with areas of 	<ul style="list-style-type: none"> • Carcinosarcoma • Sarcomatoid carcinoma of bladder with chondroid differentiation • High grade urothelial carcinoma with chondroid stromal change • Sarcomatoid variant urothelial carcinoma • Carcinosarcoma • Sarcomatoid carcinoma Urothelial and chondrosarcoma • Carcinosarcoma • Carcinosarcoma • Sarcomatoid carcinoma with heterologous elements • Carcinosarcoma • High grade papillary urothelial carcinoma with osteochondrosarcomatous differentiation • Sarcomatoid transitional cell carcinoma with areas of divergent differentiation • Carcinosarcoma • Transitional cell carcinoma with chondroid differentiation • Carcinosarcoma • Carcinosarcoma with chondrosarcomatous areas • Transitional cell carcinoma with concomitant chondromatous hamartoma • Sarcomatoid carcinoma • Sarcomatoid carcinoma with heterologous elements (chondrosarcomatous elements) • Sarcomatoid TCC • Sarcomatoid carcinoma - papillary transitional cell carcinoma and a mesenchymal chondrosarcoma-like component • Sarcomatoid transformation arising in high grade urothelial carcinoma • Urothelial Carcinoma – Invasive Sarcomatoid Carcinoma with heterologous component) • Carcinosarcoma • Carcinosarcoma • Sarcomatoid poorly differentiated Transitional cell carcinoma with
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<p>heterologous cartilaginous (background of high grade transitional cell carcinoma)</p> <ul style="list-style-type: none"> • Transitional cell carcinoma with chondroid metaplasia • Sarcomatoid carcinoma • PAPILLARY UROTHELIAL CARCINOMA MIXED WITH OSTEOCHONDROSARCOMA • Carcinosarcoma with heterologous elements • Sarcomatoid urothelial carcinoma with heterologous differentiation • Sarcomatoid carcinoma • High grade Urothelial carcinoma with sarcomatoid differentiation (chondrosarcomatous heterologous elements present, WHO – sarcomatoid carcinoma) • Grade 3 / high grade invasive transitional cell carcinoma;pT1b • Metaplastic carcinoma • Low grade papillary transitional cell carcinoma with chondroid metaplasia. • Sarcomatoid urothelial carcinoma with heterologous (chondroid) differentiation • Sarcomatoid carcinoma / High grade Grade 3 papillary transitional cell carcinoma with divergent differentiation (cartilaginous) • Sarcomatoid variant of urothelial carcinoma (carcinosarcoma) with heterologous differentiation. • Urothelial carcinoma with sarcomatous transformation • Urothelial carcinoma with sarcomatous differentiation • High grade invasive papillary urothelial carcinoma with osseous metaplasia • Sarcomatoid carcinoma with chondroid heterologous component • Sarcomatoid carcinoma with heterologous elements (chondroid, osteoid) Bladder carcinosarcoma • Carcinosarcoma with cartilage and osseous formation. 	<p>divergent differentiation.</p> <ul style="list-style-type: none"> • Carcinosarcoma with heterologous chondrosarcoma like element • Papillary urothelial carcinoma with chondroid metaplasia • Carcinosarcoma / Sarcomatoid urothelial carcinoma (with chondrosarcomatous and osteosarcomatous elements) • Sarcomatoid urothelial carcinoma with chondrosarcomatous heterologous differentiation • Carcinosarcoma with heterologous component of chondrosarcoma • Urothelial carcinoma with sarcomatoid differentiation • High grade urothelial carcinoma with chondrosarcomatous differentiation • Urothelial carcinoma with heterologous (chondrosarcomatous) differentiation • Sarcomatoid urothelial carcinoma • Carcinosarcoma (TCC +Chondrosarcoma) • Sarcomatoid carcinoma with heterologous chondrosarcoma component • Carcinosarcoma with heterologous elements (chondrosarcoma) • Urothelial carcinoma with cartilaginous metaplasia • Urothelial carcinoma with sarcomatoid change (heterologous cartilage formation) • Poorly differentiated malignant spindle cell neoplasm (top differential is transitional cell carcinoma with sarcomatoid differentiation) • Carcino-sarcoma • Carcinosarcoma (TCC grade 3 and osteosarcoma) • Sarcomatoid carcinoma of bladder with heterologous differentiation. • Poorly differentiated malignant spindle cell tumour, favoured diagnosis is sarcomatoid transitional cell carcinoma
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Reported Diagnosis: Carcinosarcoma, with papillary urothelial carcinoma and osteochondrosarcoma.

EDUCATIONAL CASE

Case Number: 767

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Diagnostic category: Educational

Clinical : M49. End stage renal failure, on immunosuppressants. Left base of thumb lesion-? Ganglion, ?Malignancy.

Specimen : Thumb

Macro : Disrupted cystic structure with thick wall 25x20x8mm.

Relevant information on special stains/immunohistochemistry:

Grocott positive.

Suggested diagnoses:

<ul style="list-style-type: none"> • Subcutaneous phaeohyphomycosis • Phaeohyphomycosis • Fungal infection • Zygomycosis • Blastomycosis • Chronic inflammation with multinucleated giant cells and fungal infection • Granulomatous inflammation with fungi present • Cryptococcus • Chromoblastomycosis with septate hyphae • Subcutaneous fungal cyst probably hyalohyphomycosis • Cryptococcosis • XANTHOGRANULOMATOUS CYST • Subcutaneous phaeohyphomycosis • Fungal infection, ?Chromoblastomycosis • Granulomatous reaction ? fungal infection • Fungal infection (?mucormycosis) • Florid inflammatory reaction ?fungi • Cutaneous histoplasmosis • Fungal infection - ? aspergillus ? mucor • Chromoblastomycosis 	<ul style="list-style-type: none"> • Fungal abcess ?type of fungus • Granulomatous – fungal organisms present • HISTOPLASMA • Pseudocystic reaction to exogenous/endogenous material • Fungal infection • Palisading granuloma possible blastomycosis • Phaeohyphomycosis • Inflammatory lesion with fungus • Fungal infection leading to cavitating histiocytic inflammatory response • Granulomatous cyst – fungal ? AV fistula related • Grocer’s apostrophe !!!!! • Granulomatous inflammation. Fungi present ? Histoplasma Duboisii or Cryptococcus • Mycetoma • Chromoblastomycosis • Phaeohypomycosis • Foreign body giant cell reaction, cystic, fungal bodies, chromoblastomycosis? • Fungal/Mycotic infection possibly due to phaeohyphomycosis (phaeomycotic cyst)
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<ul style="list-style-type: none"> • Chromoblastomycosis • Fungal infection • Mycotic Abscess • Fungus(?brown fungus), with exuberant surrounding granulomatous reaction • Fungal infection • ? aspergillosis • Abscess with fungal infection • Chromoblastomycosis • Fungal Abscess • Chromoblastomycosis • CHROMBLASTOMYCOSIS • FUNGAL INFECTION IN A CYST • Fungal infection - ? chromoblastomycosis • Fungal – query exact type • Chromoblastomycosis • Mycetoma • FUNGAL INFECTION – MUCORMYCOSIS OR CHROMBLASTOMYCOSIS • Fungal Infection • Xanthogranulomatous reaction with fungus • Giant cell reaction with fungal infection cryptococcosis • Fungal spore with foreign body giant cells and granulomatous reaction • Fungal infection (hyalohyphomycosis) • Infective but don't know which organism • Mycetoma (pigmented fungi - ?phaeochromomycosis) • Fungal infection- Phaeohyphomycosis • Mixed inflammation due to pigmented fungal infection (phaeohypomycosis or chromoblastomycosis – hard to tell on H&E) • Granulomatous inflammation, associated with fungal infection • Granulomatous inflammation due to fungal infection • Fungal elements- ? cryptococcus • Granuloma (fungal) • Chromoblastomycosis • Cryptococcus Infection • Granulomatous inflammation with fungi. 	<ul style="list-style-type: none"> • Fungal infection with histiocytic/granulomatous reaction(histoplasmosis??) • Fungal abscess (?type) • Fungal infection • Chromoblastomycosis • Fungal infection; correlate with microbiology • Fungal disease • Chromoblastomycosis • Fungal infection • Fungal cyst. • Granulomatous inflammation with fungi • Fungal granuloma • Fungal infection • Giant cell reaction with fungal infection Cryptococcus • Pigmented villonodular synovitis • Xanthogranulomatous inflammation • Fungal infection • Histoplasmosis • Opportunistic fungal infection • Fungal granuloma • Acute and chronic inflammation with macrophages giant cell reaction and fungal infection / fungal hyphae • Fungal cyst • Granulomatous Fungal Infection • Cryptococcus neoformans • Coccidiomycosis • Deep fungal infection - ? chromoblastomycosis • Soft tissue cryptococcosis • Fungal induced granulomatous inflammation • Fungal cyst • Inflamed granulation tissue with foreign body multinucleated giant cells and brown pigmented fungus likely chromoblastomycosis . • Fungi (?cryptococcus) • Fungal infection with inflammatory response ? cryptococcosis. • Fungal infection/pigmented spores • Blastomycosis. • Mycetoma (dematiaceous fungal infection) • Fungal infection
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<ul style="list-style-type: none"> • Subcutaneous phaeohyphomycosis (mycotic cyst) • Spherical fungal structures within giant cells. No malignancy (Cryptococcus) • Cystic Granulomatous Inflammation, ? fungal cryptococcus infection • Foreign body reaction • Mycetoma (dematiaceous fungi) • Chronic abscess/granuloma with an appearance resembling Cryptococcus, but this id difficult to discern on the digital images and this would depend on the morphology of the fungal organisms seen on the positive Grocott • Mycotic cyst • MYCOSIS • fungal infection with granulomatous reactions • Cryptococcosis • Histoplasmosis • Foreign body type granulomatous response to fungal infection • Granulomatous inflammatory response to fungi • Sporotrichosis • Chromoblastomycosis • Chromoblastomycosis 	<ul style="list-style-type: none"> • Fungal infection • Fungal infection (Fungi +) • Cystic cavitation lined by multinucleated giant cell histiocytic reaction, Grocott highlights <u>Fungal elements</u>, budding yeasts ? blastomycosis • Chromoblastomycosis • Chromoblastomycosis • Dimorphic fungus • Zygomycosis • Inflammatory pseudocyst lined by granulomatous inflammation secondary to fungal infection • Subcutaneous mycosis ?chromoblastomycosis • Fungal infections favouring toxoplasmosis • Opportunistic infection by dematiaceous fungal species • Granulomatous reaction with fungal spores • Chromoblastomycosis • Fungal infection, appearances suggestive of cryptococcus • Fungal infection
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Reported Diagnosis: Phaeohyphomycotic cyst. Grocott positive.