

South East England General Histopathology EQA Scheme

Round q Final Case Analyses

Cases 829 to 840

Circulated September - October 2021

143 responses (81.71%)

Prepared: December 2021

For information on scoring and statistical analysis, please see explanation on our website under section "How the scoring works".

Please click here to understand the scoring protocol for cases

Authorised by:

Prof J Schofield Date: 10/12/21

With thanks to those who contributed to this round:

Trust	ISO accreditation number
East Sussex Healthcare NHS Trust	8790
Maidstone and Tunbridge Wells NHS Trust	8062
Mid and South Essex NHS Foundation Trust	7880
Western Sussex Hospitals NHS Foundation Trust	1
Swansea Bay University Health Board	8990
East Kent Hospitals University NHS Foundation Trust	9246
Epsom and St Helier University Hospitals NHS Trust	8626
Kingston Hospital NHS Foundation Trust	8132
King's College Hospital - NHS Foundation Trust	8620
Guys and St Thomas's NHS Foundation Trust	9323
Frimley Park Hospital NHS Foundation Trust	9727

Case Number: 829 Click here to view digital image

Diagnostic category: Miscellaneous

Clinical : M38. Left submandibular region (level lb) cystic mass measuring

3.7cm in greatest dimension

Specimen : Cyst

Macro : A cyst measuring 35mm with smooth outer surface and containing

creamy soft material. In the same container there are multiple lymph

nodes (no slide submitted)

	Final Merges Branchial Cleft / Lymphoepithelial cyst	Score
1	Branchial Cleft / Lymphoepithelial cyst	9.44
2	Epithelial / Epidermoid cyst	0.49
3	Tonsillar cyst	0.07

Most popular diagnosis: Branchial Cleft / Lymphoepithelial cyst

Reported Diagnosis: Squamous inclusion cyst

Case Number: 830 Click here to view digital image

Diagnostic category: Respiratory

Clinical : F76. Likely lung Ca with bone mets

Specimen : Lung Biopsy

Macro: Tan core measuring 15mm

Immuno: Positive: CK7, TTF1, Negative: CK20, CA125, Napsin A, CDX2, ER,

PR, GCDFP, WT1, PAX8, Gata3, CK5/6, p63

	Final Merges	Score
1	Primary lung adenocarcinoma	8.98
2	Metastatic thyroid carcinoma	0.44
3	Carcinoma. Primary/metastatic not stated	0.58

Most popular diagnosis: Primary lung adenocarcinoma

Reported Diagnosis: Lung Adenocarcinoma

Case Number: 831 Click here to view digital image

Diagnostic category: Breast

Clinical : F66. Left mastectomy and SLNB

Specimen : Breast

Macro Left mastectomy weight 1337grams, dimensions 180mm ML, 220mm

> SI, 75mm AP. Nipple bearing ellipse of skin 205 x 150mm. Poorly defined firm lesion 30mm across present centrally, 25mm away from

nipple.

Immuno: p63 - occasional positive cells at periphery of ducts.

ER - strongly and diffusely positive in the epithelial cells.

	Final Merges	Score
1	In-situ / Intraductal / Intracystic / Encysted Papillary carcinoma / DCIS	9.76
2	Atypical / possible / suggestive of DCIS	0.09
3	Intraductal papillary lesion / papilloma / Nipple adenoma	0.15

Most popular diagnosis: In-situ / Intraductal / Intracystic / Encysted Papillary carcinoma / DCIS

Reported Diagnosis: Intraductal papillary carcinoma

Case Number: 832 Click here to view digital image

Diagnostic category: Endocrine

Clinical: F53. Total thyroidectomy with a right dominant nodule - for Graves

disease

Specimen: Total thyroidectomy

Macro: Thyroid with right lobe 55x20x25mm & left lobe 30x25x15. In the

right lobe is a tan haemorrhagic nodule 15mm maximum. Rest of

thyroid has a nodular cut surface.

	Final Merges	Score
1	Thyroid hyperplasia	3.10
2	Thyroid adenoma	3.81
3	Thyroid carcinoma	2.12
4	Non-invasive follicular thyroid neoplasm	0.55
5	Follicular tumour of uncertain malignant potential	0.07
6	Hurthle cell neoplasia	0.07
7	Toxic nodule	0.07
8	Hurthle cell adenoma with suspicion of minimally invasive Carcinoma	0.07
	THIS CASE HAS BEEN EXCLUDED	
	FROM PERSONAL ANALYSES	

Most popular diagnosis: Thyroid adenoma

Reported Diagnosis: Minimally invasive (capsule only) follicular

carcinoma

Document title: Final Case Analysis template

Case Number: 833 Click here to view digital image

Diagnostic category: Lymphoreticular

Clinical : M64. multiple left lateral cervical lymph nodes

Specimen : Lymph nodes

Macro: Left lateral cervical lymph node dissection - fibrofatty tissue measuring up

to 35mm. On slicing, multiple lymph nodes are seen.

	Final Merges	Score
1	Final Merges Metastatic papillary carcinoma of thyroid	10.0

Most popular diagnosis: Metastatic papillary carcinoma of thyroid

Reported Diagnosis: Lymph node containing metastatic papillary thyroid carcinoma.

Case Number: 834 Click here to view digital image

Diagnostic category: Gynae

Clinical : F43. Vulval cyst

Specimen : Vulval cyst excision

Macro: Irregular piece of tan tissue measuring 35 x 20 x 9mm

	Final Merges	Score
1	Bartholin's cyst	9.89
2	Epithelial inclusion cyst	0.04
3	Mullerian cyst	0.06
4	Other benign vaginal cyst	0.01

Most popular diagnosis: Bartholin's cyst

Reported Diagnosis: Bartholin's gland cyst

Case Number: 835 Click here to view digital image

Diagnostic category: GI

Clinical : M79. Biliary obstruction. Oedematous ampulla, ? malignant

Specimen : Ampullary Biopsy

Macro: Four biopsies up to 3mm

	Final Merges	Score
1	(Ampullary) adenocarcinoma	9.95
2	IAPN (intra-ampullary papillary tubular neoplasia)	0.05

Most popular diagnosis: (Ampullary) adenocarcinoma

Reported Diagnosis: Adenocarcinoma consistent with local (pancreaticobiliary) origin

Case Number: 836 Click here to view digital image

Diagnostic category: GU

Clinical : M44. Testicular Lump

Specimen : Testis

Macro: Testis 45x45x40mm with solid grey white soft tumour 27x25mm.

	Final Merges	Score
1	Seminoma	9.98
2	Yolk sac tumour	0.01
3	Spermatocytic tumour	0.01

Most popular diagnosis: Seminoma

Reported Diagnosis: Classical seminoma

Case Number: 837 Click here to view digital image

Diagnostic category: Skin

Clinical : 24M. Wide anal fissure

Specimen : Anal tissue

Macro: None provided

	Final Merges	Score
1	Fibroepithelial / Anal Polyp / sentinel skin tag	0.49
2	Anal fissure	1.06
3	Exclude Syphilis	4.33
4	Exclude Crohn's	1.34
5	Exclude parasites	0.07
6	Lichenoid / lichen planus	1.16
7	Chronic inflammation +/- ulcer / epithelioid granulomas / plasma cell mucositis	1.27
8	Haemorrhoid	0.07
9	Exclude infections	0.14
10	??any abnormality of renal / parathormone function	0.07

THIS CASE HAS BEEN EXCLUDED FROM PERSONAL ANALYSES

Most popular diagnosis: Exclude Syphilis

Reported Diagnosis: Non-caseating granulomas consistent with

Crohn's disease

Document title: Final Case Analysis template

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Case Number: 838 Click here to view digital image

Diagnostic category: Lymphoreticular

Clinical M27. Left para-renal mass excised.

Specimen : Left para-renal mass

Macro: A fatty mass 160x110x80mm, weight 299g, inked black. Serial sectioning reveals and tan to fatty well circumscribed nodule 91x41x37mm which is abutting the inked margin. A separate adrenal 35x35mm is noted 8mm from the mass.

Immuno: CD20 shows small follicles.CD21 shrunken follicular dendritic cell meshworks. Plasma cells numbers are not excessive by CD38, CD79a or MUM1 immunostaining and express mixed light and heavy chain by ISH and immunochemistry respectively. IgG4 expressing plasma cells represent only a small proportion of IgG-class plasma cells. CMV, EBER ISH and HHV8 are all negative.

	Final Merges	Score
1	Hyaline vascular Castleman's disease	9.29
2	Accessory spleen / ectopic splenic tissue / spenunculus	0.37
3	Reactive LN with fibrosis	0.25
4	HV Castleman's disease and angiomyolipoma	0.07
5	Follicular lymphoma	0.01

Most popular diagnosis: Hyaline vascular Castleman's disease

Reported Diagnosis: Hyaline-vascular variant of Castleman's disease

Document title: Final Case Analysis template

EDUCATIONAL CASE

Case Number: 839 Click here to view digital image

Diagnostic category: Miscellaneous

Clinical M83. Suspect right eve conjunctival squamous cell carcinoma

Specimen : Conjunctival biopsy

Macro: Piece of tissue measuring 3mm, plus fragment.

Immuno: EMA, CK7 and CK5/6 positive; p63 patchy positivity; CK20, GCDFP-15,

S-100, chromogranin, synaptophysin, CD56, SMA and myosin negative.

Special stains: PAS and Southgate's mucicarmine – negative

Suggested diagnoses:

Squamous cell carcinoma x 22

Adenosquamous carcinoma x 22

Adenocarcinoma x 16

Sebaceous Carcinoma x 11

Mucoepidermoid carcinoma (MEC) x 7

Oncocytoma x 5

Conjunctival carcinoma x 4

Conjunctival squamous cell carcinoma x 3

APOCRINE ADENOMA x 3 Oncocytic carcinoma x 3

Poorly differentiated squamous carcinoma x 2

Conjunctival oncocytic adenocarcinoma x 2

Carcinoma x 2

Meibomian duct carcinoma x 2

Lacrimal gland adenocarcinoma x 2

Squamous cell carcinoma with acantholysis x 2

Malignant lacrimal gland tumour

Lacrimal gland carcinoma

Squamous cell carcinoma with pseudoglandular

architecture

SQUAMOUS CELL CARCINOMA WITH

MUCOEPIDERMOID FEATURES

Carcinoma – Squamous cell carcinoma

Invasive carcinoma confirmed

Apocrine carcinoma (of Moll's gland)

Carcinoma, favour squamous cell carcinoma of

conjunctiva

Adenocarcinoma with focal sebaceous

differentiation. Consider possibility of metastases

or direct extension from skin. ?Muir Torre

syndrome.

Adnexal adenocarcinoma

Apocrine adenocarcinoma

Carcinoma of the conjunctival glands

Inverted papilloma with atypia

Carcinoma? adenosquamous

Eccrine adnexal tumour

Conjunctival adnexal carcinoma

POORLY DIFFERENTIATED CARCINOMA OF

CONJUCTIVA

Adenocarcinoma of adnexal ?sweat gland origin

Malignant adnexal tumour

Sweat gland type carcinoma

Adenocarcinoma? Meibomian gland carcinoma

Malignant adnexal tumour, suggestive of a

sebaceous carcinoma

Metastatic adenocarcinoma

Adenocarcinoma, possibly of lacrimal duct

Genetic storage defect

CARCINOMA OF CONJUCTIVA, PROBABLY

MUCOEPIDERMOID

Acantholytic squamous carcinoma

Conjunctival intraepithelial neoplasia

conjunctival squamous cell carcinoma

Acantholytic SCC

Conjunctival oncocytic adenocarcinoma

Inverted benign papilloma

Squamous carcinoma in situ with marked

adnexal involvement

Metastatic carcinoma ?primary

Squamous cell carcinoma, pseudoglandular

Reported Diagnosis: Oncocytic adenocarcinoma.

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Approved by: Scheme Manager Date of issue: May 2021

EDUCATIONAL CASE

Case Number: 840 Click here to view digital image

Diagnostic category: Gynae

Clinical F24. Intrapartum stillbirth (38+5 weeks, 2360g, female SVD). Known

I-cell disease (genetic testing during pregnancy)

Specimen : Placenta

Macro: 752g singleton placenta 200x175x35mm. 200x12mm cord.

Suggested diagnoses:

I cell disease x 32

Mucolipidosis x 16

Mucolipidosis type II x 10

Chorangiosis x 8

Placental calcification x 4

Chorangioma x 4

Foetal storage disease x 2

Trophoblastic Lipidosis x 2

Glycogen storage disease x 2

Placental mucolipidosis x 2

Placental lipidosis consistent with I-cell

disease x 2

Foamy macrophages/lipidosis of villi,

consistent with I-cell disease x 2

Lysosomal storage disease x 2

Placental I-cell disease

Chorioamnionitis

Chorangiomatosis

Mucolipidosis of the chorionic villi

MUCOPOLYSACCHARIDOSIS

Marked placental Calcification and

chorangioma

Vacuolistion on cells decidua and cytotrophoblast, infarction, vascular

throbosis, consistent ith I-cell disease

(mucolipidosis)

Date of issue: May 2021

Placenta of storage disorder (I-cell disease)

Placental calcification due to

hyperparathyroidism associated with I cell

disease

POST MATURE CALCIFIED PLACENTA WITH VACUOLIZATION OF SYNCYTIOTOPHOBLASTS

CONSISTENT WITH I- CELL DISEASE

Consistent with history of mucolipidosis Vacuolization of the syncitiotrophoblast and

calcification in keeping with placental

Vacuolisation of chorionic villi consistent with I cell disease type 1

Foamy syncitiotrophoblast c/w I-cell disease Placenta with changes in keeping with I cell

disease

Foamy cells within villi (syncytiotrophoblastic

layer as part of inclusion cell disease)

Foamy cells present? consistent with I-cell disease (mucolildosis), although I haven't

looked at a placenta in over 20 years

Metastatic tumour to placenta

SUBCAPSULAR HAEMORRHAGE +

CALCIFICATION FOR PLACENTAL

INSUFFICIENCY

Vacuolated Hofbauer cells in villi consistent

with a storage disorder including

Vacuolated trophoblastic cells in I cell disease

?Lipid storage disease. (mucolipidosis).

Third trimester placenta, congestion present.

Vacuolisation of syncitiotrophoblast c/w I cell

disease Cacifications are coarse. The

cytotrophoblast shows vacuolated lipid

storage cells

Multivacuolated macrophages consistent with

I-cell lysosomal storage disorder

CALCIFICATION IN KEEPING WITH PLACENTAL

INSUFFICIENCY & MUCOLIPIDOSIS

Trophoblastic lipidosis in keeping with foetal

I-cell disease

Placental lipidosis in keeping with congenital lipid storage disorder ie foetal I-cell disease Trophoblastic lipidosis consistent with I cell

disease

Chorangiosis and extensive vacuolisation of syncytiotrophoblast suggestive of lysosomal

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changes expected with I-cell disease (mucolipidosis type2)

TROPHOBLASTIC LIPIDOSIS, CONSISTENT WITH I-CELL DISEASE

I cell disease placental inclusion cells Inclusion body disease inclusions in macrophages of placenta

Vacuolated cells in syncytiocytotrophoblasts in keeping with I-cell disease + dystrophic microcalcification

PLACENTAL CLCIFICATION AND **TOXOPLASMOSIS**

Ischaemia

Multivacuolated macrophages in keeping with known I-cell lysosomal disease Placental Calcification Clusters and intervillous - moderate - Grade 6 Vacuolisation of syncytiotrophoblast Vacuolization of the syncytiotrophoblastic layer of the chorionic villi and chorionic mesenchymal cells consistent with fetal I-cell disease.

Chorioamnionitis

Lysosomal storage disorder (GM1 gangliosidosis)

Sickle Cell Disease

VACUOLISATION OF SYNCYTIO TROPHOBLASTIC **CELLS - CONSISTENT WITH PLACENTAL** CHANGES IN FETAL I-CELL DISEASE

Aggregates of foamy histiocytes present in the intervillous space consistent with an inherited glycoside storage disorder.

storage disease IKW clinical history.

Multivacuolisation of trophoblast, in keeping with i-cell disease

Vacuolization of syncytiotrophoblast layer in keeping with I cell disease

Trophoblastic vacuolation consistent with Icell disease (mucolipidosis)

Increased Hofbaur cells in villi and possible cryptococci

Fetal hydrops & vacuolisation of villus cells compatible with fetal storage disorder (I-cell disease / mucolipidosis).

(Retroplacental hematoma is also present correlate clinically re any history of abruption).

Trophoblastic lipidosis

Reported Diagnosis: Features consistent with I-cell disease. Extensive vacuolisation of villous trophoblast consistent with known diagnosis of mucolipidosis.

Date of issue: May 2021