# **South East England General Histopathology EQA Scheme**



7808

## Round b **Final Case Analyses**

Cases 647 to 658

Circulated May-June 2016

130 responses (90.28%)

Prepared August 2016

Authorised by:

Prof J Schofield

Date: 15/08/16

#### With thanks to those who contributed to this round:

Trust	ISO accreditation number	CPA accreditation number
Royal Surrey County Hospital NHS Foundation Trust		1242
Hospital Pedro Hispano		
East Kent Hospital University Foundation Trust		899
Brighton & Sussex University Hospital NHS Trust		0799
Queen Victoria Hospital NHS Foundation Trust	8238	
Ashford & St Peter's NHS Foundation Trust		
Basildon & Thurrock University Hospitals NHS Foundation Trust	7882	
Guys and St Thomas' NHS Foundation Trust	8126	
Mid Essex Hospital Services NHS Trust		1031
Frimley Park Hospital NHS Foundation Trust	7496	
Epsom & St Helier University Hospital NHS Trust		704
East Sussex Healthcare NHS Trust		

Date of issue: June 2016

# This case is excluded from personal scoring

Case Number: 647 Click here to view digital image

Diagnostic category: Endocrine

Clinical M66. Fibrotic goitre post thyroiditis. Compression symptoms.

Specimen : Thyroid right lobe

**Macro**: Lobe of thyroid 113gm measuring 105 x 65 x 52mm. The cut surface is pale, fleshy and multinodular. No cystic or haemorrhagic areas.

	Final Merges	Score
1	Hashimoto's thyroiditis	6.99
2	Reidel's thyroiditis	1.61
3	MALT lymphoma	0.59
4	Marginal zone lymphoma	0.31
5	Fibrosing thyroiditis	0.16
6	Plasma cell granuloma	0.15
7	Likely reactive but exclude lymphoma	0.09
8	De Quervain thyroiditis (Granulomatous)	0.08
9	Non-specific lymphocytic thyroiditis	0.02

Most popular diagnosis: Hashimoto's thyroiditis

**Reported Diagnosis:** Hashimotos thyroiditis

This case is excluded from personal scoring

Case Number: 648 Click here to view digital image

Diagnostic category: Breast

**Clinical**: F47. Rupture of breast implant (PIP). Malignant transformation?

Specimen : Breast

**Macro**: Three irregular fragments of dark tan tissue varying between 1.2 and 2.6cm.

	Final Merges	Score
1	Silicone reaction & metaplasia/hyperplasia	9.75
2	Synovial metaplasia & prominent macrophage reaction	0.08
3	?lymphoma associated with silicone implant	0.08
4	Florid inflamm reaction and reactive epithelial changes	0.08
5	Xanthogranulomatous inflammation with reactive changes	0.01

Most popular diagnosis: Silicone reaction & metaplasia/hyperplasia

**Reported Diagnosis:** Papillary synovial metaplasia and histocytic response to implant.

Case Number: 649 <u>Click here to view digital image</u>

Diagnostic category: Lymphoreticular

Clinical : M21. HIV positive. Low CD4 count. Palpable lymphadenopathy right

axilla ?Lymphoma ?HIV related.

Specimen : Lymph node axilla

**Macro:** The specimen consists of two lymph nodes, one15 x 10 x 10mm and the other 16 x 10 x 10mm.

	Final Merges	Score
1	HIV related lymphadenopathy	7.63
2	Lymphadenopathy (HIV not mentioned)	1.27
3	Progressive Transformation germinal centres	1.00
4	HIV related changes with probable malignant transformation	0.08
5	Reactive ?infection	0.02

Most popular diagnosis: HIV related lymphadenopathy

Reported Diagnosis: Florid follicular hyperplasia consistent with early HIV lymphadenopathy.

## This case is excluded from personal scoring

Case Number: 650 Click here to view digital image

Diagnostic category: GI Tract

Clinical : F77. 3/12 History of left parotid mass. FNA not diagnostic. MRI-

benign neoplasm. Extracapsular dissection left parotid mass.

Specimen : Left parotid mass

**Macro:** An ovoid nodule measuring 38 x 18 x 16. Slicing shoes a fleshy tan cut surface with areas of haemorrhage, abutting the capsule. Immuno: CD10 positive. RCC marker negative.

	Final Merges	Score
1	Metastatic / renal cell clear cell carcinoma	5.47
2	Myoepithelioma	1.54
3	(Probably) Primary clear cell carcinoma	1.04
4	Clear cell carcinoma NOS	0.70
5	Clear cell tumour	0.54
6	Clear cell oncocytoma	0.45
7	Acinic cell carcinoma. Clear cell variant	0.12
8	Clear cell myoepithelial carcinoma	0.12
9	Clear cell variant of other primary carcinoma	0.02

Most popular diagnosis: Metastatic / renal cell clear cell carcinoma

Reported Diagnosis: Metastatic clear cell renal cell carcinoma

# This case is excluded from personal scoring

Case Number: 651 Click here to view digital image

Diagnostic category: GU

**Clinical**: F54. Laparoscopic nephrectomy.

**Specimen**: Renal tumour

**Macro:** Tumour with homogenous tan surface, well circumscribed. Immuno: CK7 and ECadherin +ve; Vimentin and CD117 –ve.

	Final Merges	Score
1	Chromophobe RCC	9.66
2	RCC	0.16
3	Oncocytoma	0.10
4	Not answered (and no valid exemption)	0.08

Most popular diagnosis: Chromophobe RCC

Reported Diagnosis: Chromophobe carcinoma

Case Number: 652 <u>Click here to view digital image</u>

Diagnostic category: Miscellaneous

Clinical : M6. Hard soft tissue swelling left palm - ?nature

Specimen : Soft tissue

**Macro:** Single irregular piece of fibrous and fatty tissue 21 x 16 x 17mm. Slicing shows a firm white cut surface.

	Final Merges	Score
1	Juvenile/calcifying aponeurotic fibroma	9.52
2	Palmar fibromatosis	0.23
3	Ossifying fibro-myxoid tumour	0.08
4	Rheumatoid nodule	0.08
5	Fibroma	0.08
6	Calcifying fibrous pseudotumour	0.01

Most popular diagnosis: Juvenile/calcifying aponeurotic fibroma

Reported Diagnosis: Calcifying aponeurotic fibroma

## This case is excluded from personal scoring

Case Number: 653 Click here to view digital image

Diagnostic category: Gynae

Clinical : F67. Right ovarian tumour. Bilateral salpingo-oophorectomy.

Specimen : Ovary

**Macro:** Ovary measures 60 x 40 x 30mm with a torn surface. On slicing there is a solid grey yellowish mass that seems to be confirmed to the ovary. There is a calcified consistency in some areas. Immuno: Positive for CAM5.2 and MNF116; negative for PLAP, TTF-1, S-100, WT-1, Calretinin, Inhibin, AFP, CK7, CK20 and Melan A. Ki67 index is less than 1%.

	Final Merges	Score
1	Carcinoid tumour	5.08
2	Sex cord stromal tumour (sertoli cell tumour)	1.69
3	Endometroid carcinoma/adenocarcinoma	0.88
4	NET (NOS)	0.72
5	Female adnexal tumour of Wolfian origin	0.55
6	Sertoli-Leydig tumour	0.52
7	Adult granulosa cell tumour / endometroid adenofibroma	0.27
8	Metastatic carcinoma with sertoliform features	0.20
9	Gonadoblastoma	0.05
10	Leydig tumour	0.04

### Most popular diagnosis:

Reported Diagnosis: Ovarian carcinoid tumour. Comments following 2<sup>nd</sup> opinion: although this may well be an ovarian primary, most ovarian carcinoids arise within teratomatous neoplasms. There are no teratomatous elements represented and theoretically a metastasis from elsewhere should be excluded.

## This case is excluded from personal scoring

Document title: Final Case Analysis template

Page 8 of 13

WARNING: This document is only controlled if viewed electronically from its original location if the hard copy is validated Printed Copy No. Approved by: Scheme Manager Validated by: (signature)

Case Number: 654 Click here to view digital image

Diagnostic category: Respiratory

**Clinical**: M75. Endobronchial lesion left upper lobe protruding into left main

bronchus

Specimen : Lung

**Macro:** Left upper lobectomy 16 x 6 x 8cm. 2.8cm polypoid tumour seen protruding at bronchial resection margin, without underlying invasion. <u>Immuno:</u> Positive - CD10, Vimentin, CAM5.2. Negative - TTF1, P63, CK20, CK7.

	Final Merges	Score
1	Metastatic clear cell RCC	9.98
2	Clear cell carcinoma	0.01
3	Perivascular epitheloid cell (PECOMA)	0.01

Most popular diagnosis: Metastatic clear cell RCC

Reported Diagnosis: Metastatic clear cell renal cell carcinoma

Case Number: 655 <u>Click here to view digital image</u>

Diagnostic category: Skin

Clinical : M52. Excision of large keratotic lesion, right lower leg. 'Birth mark'

previously. Had laser therapy but lesion returned very quickly.

Specimen : Skin

**Macro:** Skin ellipse 85 x 30 x 25mm with a 52 x 20 x 18mm warty nodule. The surrounding skin also has an irregular surface.

	Final Merges	Score
1	Haemangioma – All types	7.81
2	Vascular malformation/vascular hamartoma	0.95
3	Angiokeratoma	0.54
4	Angiomatosis	0.46
5	Other benign vascular tumour	0.11
6	Arteriovenous malformation with overlying angiokeratoma	0.08
7	Retiform haemangioendothelioma	0.04
8	Unlikely malignant vascular tumour	0.01

Most popular diagnosis: Haemangioma – All types

Reported Diagnosis: Verrucous haemangioma

Case Number: 656 <u>Click here to view digital image</u>

Diagnostic category: Skin

Clinical : F70. Excision biopsy nodule right upper back. Clinically BCC.

**Specimen** : Skin

**Macro:** EOS 20 x 12 x 4mm with 5mm flesh coloured papule.

	Final Merges	Score
1	Bowen's (&intradermal naevus/dyplastic naevus)	8.12
2	Malignant melanoma (and naevus)	1.21
3	In situ melanoma in a melanocytic naevus	0.33
4	Intradermal melanocytic naevus with ?Pagets disease	0.23
5	Melanocytic Intraepithelial Neoplasia	0.06
6	Extramammary Pagets disease	0.04
7	Atypical melanocytic proliferation/lesion	0.01

Most popular diagnosis: Bowen's (&intradermal naevus/dyplastic naevus)

Reported Diagnosis: Sev dysplastic AK/Bowens + benign IDN

#### **EDUCATIONAL CASE**

Case Number: 657 Click here to view digital image

**Diagnostic category:** Educational

Clinical : M82 Adrenal mass. Previous anterior resection for Dukes B Ca

rectum and lobectomy for lung cancer.

Specimen : Adrenal mass

**Macro:** Mass weighing 500g and measuring 125 x 90 x 100mm. Cut surface necrotic with no visible adrenal. Immuno: CK20, CEA and CDX2 positive; CK7 and TTFI negative.

### Suggested diagnoses:

Metastatic rectal ca

Metastatic Ca large bowel

Metastatic carcinoma, probably lower GFI tract primary

Metastatic colorectal adenocarcinoma

Metastatic carcinoma of rectum

Metastatic adenocarcinoma

Metastatic adenocarcinoma of rectum

Metastatic adenocarcinoma probably from

colorectal primary

Metastatic carcinoma, likely from colorectal primary

Metastatic large bowel adenocarcinoma

Metastatic adenocarcinoma consistent with

colorectal primary

Date of issue: June 2016

Metastatic adenocarcinoma, primary colon

? metastatic adenocarcinoma +/- small

cell/neuroendocrine element

gland of Adrenal Metastasis adenocarcinoma, intestinal type (GI tract to

investigate)

Metastatic adenocarcinoma, probably lower

GI

Metastatic colorectal carcinoma to adrenal Metastatic adenocarcinoma from GI tract

Metastatic adenocarcinoma of colorectal

origin

Metastatic adenocarcinoma c/w a colorectal primary

Metastatic carcinoma (colorectal)

neuroendocrine.

Adenocarcinoma- bowel origin

Metastatic CRC

Adrenal containing metastatic gland

colorectal adenocarcinoma

Metastatic adenocarcinoma (mostly from

lower GI tract - intestinal type)

Secondary colorectal carcinoma

Metastatic adenocarcinoma favouring

colorectal origin

Metastatic bowel adenocarcinoma

Metastatic adenocarcinoma, consistent with

colo-rectal primary

Colonic metastatic adenocarcinoma deposit

Metastatic colorectal carcinoma in adrenal

gland

Metastatic Adenocarcinoma from lower GI

likely from previous Rectal Adenocarcinoma

Metastatic adenocarcinoma

gastrointestinal origin

Metastatic, lung adenocarcinoma (enteric

variant)

Colorectal carcinoma metastasis

Colorectal metastasis

#### **Reported Diagnosis: Metastatic Adenocarcinoma from colonic** primary

Document title: Final Case Analysis template WARNING: This document is only controlled if viewed electronically from its original location if the hard copy is validated Printed Copy No. Approved by: Scheme Manager Validated by: (signature)

Page 12 of 13

Master copy registered on Pathology Qpulse database

#### **EDUCATIONAL CASE**

Case Number: 658 Click here to view digital image

**Diagnostic category:** Educational

Clinical : M80. Enlarged axillary and groin nodes. Ultrasound guided biopsy of

left axillary node

Specimen : Lymph node core biopsy

Macro: Multiple cores of cream coloured tissue

### Suggested diagnoses:

Chronic lymphatic leukaemia

Lymphoma

Castlemans disease

Lymphoplasmamcytic / lymphoplasmacytoid lymphoma

Lymphocyte predominant Hodgkin's lymphoma

Hairy cell leukaemia

Non-Hodgkin's Lymphoma Marginal zone lymphoma

B-cell lymphoma

Low grade NHL? LPL? Marginal

Low grade non Hodgkin lymphoma needs IHC

Non-Hodgkin's lymphoma –lymphoplasmacytic type

Benign lymphadenopathy NOS Lymphoplasmacytic lymphoma

Malignant Lymphoma

Low grade non-hodgekin lymphoma. ?CLL

Favour low grade lymphoma, requires immuopanel

Lymphoma, ? Hodgkin's

Low grade non Hodgkin lymphoma favouring

lymphoplasmacytic lymphoma ?Lymphoplasmacytoid lymphoma

Lymphoproliferative disorder, ? low grade lymphoma. IHC

required.

Low grade lymphoma

Low grade NHL

? Lymphoma for further molecular/immunohistochemical testing

? Castleman's disease

Low grade non-hodgkin lymphoma. ?marginal zone, ?LPL

Hodgkins disease

Dermatopathic lymphadenopathy

Lymphoma ?T cell,

Metastatic melanoma

CLL type small cell lymphoma

Lymphoplasmacytic lymphoma

Marginal zone lymphoma

Plasmacytic lymphoma

Angioimmunoblastic T cell lymphoma

Hodgkin's lymphoma lymphocytic predominant / Lymphoma

Immunostaining for confirmation

B-Cell Non Hodgkin Lymphoma with plasmacytoid

features.(immunos to confirm)

Lymphoma, differential between low grade B cell lymphoma with plasmacytic differentiation and T cell angioimmunoblastic.

Resort to IHC, history of ?IgG paraproteins

Nodular lymphocyte predominant Hodgkin's lymphoma

Mixed cellularity hodgkins lymphoma

Plasmacytoma

Lymph node - B-cell lymphoma (IHC needed)

Hodgkin's lymphoma - nodular lymphocytic predominant

Hodgkin's lymphoma

? Lymphoplasmacytic lymphoma (needs IHC for confirmation)

Lymphoplasmacytic lymphoma

Low grade lymphoma (needs immuno panel for subtype)

Mveloma

Plasmablastic lymphoma

Probably marginal zone lymphoma, needs IHC

Non Hodgkin's Lymphoma probably mantle cell

Follicular B cell lymphoma

NHL? CLL in transformation

Dermatopathic.

NH Lymphoma (possibly marginal zone with plasmacytic

differentiation, but needs full IHC workup)

Low grade B-NHL with plasmacytoid differentiation (?LPL)-

needs immuno.

Small round blue cell neoplasm possibly lymphoma - need

immuno

NHL

Small lymphocytic lymphoma

Non- Hodgkin's lymphoma - ?Angio-immunoblastic T-cell NHL

? Marginal zone lymphoma

? Hairy cell leukaemia infiltrate

Dermatopathic lymphadenopathy

Non-Hodgkin's lymphoma. Referral required for typing.

Lymphoplasmacytic Lymphoma

Malignant lymphoma, requires ICC

Low grade non-Hodgkin lymphoma (mostly LPL) - IHC required

Low grade diffuse lymphoma suggestive of SLL/CLL.

Immunopanel to be done for typing

Low grade diffuse lymphoma suggestive of SLL/CLL.

Immunopanel to be done for typing

Low grade B cell lymphoma

Plasma cell neoplasm; further work up and clinical history

required.

Castleman's, plasma cell type

Lymphoma (?nodular lymphocyte predominant Hodgkins)

Nodular lymphocyte predominant Hodgkin's Lymphoma

Favour Castleman's disease, plasma cell type.

(dDx includes Mantle cell lymphoma, myeloma, autoimmune lymphadenitis)

Low grade lymphoma, favouring marginal zone lymphoma

Low grade Non Hodgkin Lymphoma-SLL/CLL

Burkitt Lymphoma

Nodular lymphocyte predominant lymphoma Lymphocyte rich Hodgkin's lymphoma

### Reported Diagnosis: Low grade B-Cell lymphoma of lymphoplasmacytic type.

Document title: Final Case Analysis template

WARNING: This document is only controlled if viewed electronically from its original location if the hard copy is validated Printed Copy No.

Approved by: Scheme Manager Date of issue: June 2016 Master copy registered on Pathology Qpulse database Page 13 of 13

Validated by: (signature)