7808

South East England General Histopathology EQA Scheme

Round I
Final Case Analyses

Cases 768 to 779

Circulated
September - October 2019

137 responses (86.16%)

Prepared December 2019

Authorised by:

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With thanks to those who contributed to this round:

Trust	ISO accreditation number
Maidstone and Tunbridge Wells NHS Trust	8062
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Kingston Hospital NHS Foundation Trust	8132
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Colchester Hospital University NHS Foundation Trust	9316
Frimley Park Hospital NHS Foundation Trust	9727
Guys and St Thomas' NHS Foundation Trust	9323

Case Number: I768 *Click here to view digital image*

Diagnostic category: GI

Clinical : F56. Three polyps in rectum. Bowel cancer screening patient. This polyp 23mm across, hot snare piecemeal excision.

Specimen : Polyp

Macro : 2 brown firm polyps 16mm and 8mm max dimension

	Final Merges	Score
1	Mixed adenoma, LG dysplasia & SSL /adenoma / hyperplastic polyp	10.00

Most popular diagnosis: Mixed adenoma, LG dysplasia & SSL /adenoma / hyperplastic polyp

Reported Diagnosis: Mixed Polyp

Case Number: I769 *Click here to view digital image*

Diagnostic category: GU

Clinical : M55. Testicular mass tethered to skin. History of prostatic cancer

Specimen : Testicular mass

Macro : Testicle with ellipse of attached scrotal skin. On section there is a 30mm pale mass involving testis and epididymis and adherent to overlying skin ellipse.

Relevant information on special stains/immunohistochemistry:

CD68 (PGM1) positive. CAM5.2 and Inhibin negative

	Final Merges	Score
1	Granulomatous orchitis / Malaloplakia	9.72
2	Fibrohistiocytoma	0.16
3	Inflammatory pseudotumour (myofibroblastic)	0.11
4	Myeloid sarcoma	0.02

Most popular diagnosis: Granulomatous orchitis / Malaloplakia

Reported Diagnosis: Malaloplakia

Case Number: I770 *Click here to view digital image*

Diagnostic category: Endocrine

Clinical : F64. Mass right thyroid lobe. Increasing in size.

Specimen : Right hemithyroid

Macro : Thyroid lobe 60 x 40 x 35mm, weighing 37gms. Sectioning shows a well circumscribed nodule 40mm maximum with solid and cystic appearance. A small amount of background gland is present and this appears normal.

	Final Merges	Score
1	Papillary carcinoma (Follicular variant)	9.73
2	Follicular carcinoma	0.14
3	Follicular adenoma	0.04
4	Follicular neoplasm	0.09

Most popular diagnosis: Papillary carcinoma (Follicular variant)

Reported Diagnosis: Encapsulated follicular variant of papillary thyroid carcinoma with capsular invasion

Case Number: I771 *Click here to view digital image*

Diagnostic category: Miscellaneous

Clinical : M38. Large cyst neck

Specimen : Neck cyst

Macro : Irregular brown tissue with attached cyst weighing 39gms. The cyst measures 35x30x30mm and attached tissue 45 x 35 x 30mm. The cyst contains thick greenish brown material.

	Final Merges	Score
1	Thyroglossal Cyst	9.74
2	Bronchial Cyst	0.07
3	Branchial Cyst	0.18

Most popular diagnosis: Thyroglossal Cyst

Reported Diagnosis: Thyroglossal Duct Cyst

Case Number: I772 *Click here to view digital image*

Diagnostic category: Lymphoreticular

Clinical : M41. 5-month history of right supraclavicular swelling. Previous cough with dry sputum, but chest radiograph clear. LDH 242 IU/L but all other bloods normal.

Specimen : Lymph node

Macro : Part of lymph node 22 x 9 x 8mm. Bisected and all embedded.

Relevant information on special stains/immunohistochemistry:
Scattered large cells positive for CD20, OCT2, BCL6, EMA and MUM1, but negative for CD30, CD15
and EBV (EBER ISH). CD21 shows intact follicular dendritic cell meshworks.

	Final Merges	Score
1	Nodular lymphocytic predominant Hodgkin's Lymphoma	9.44
2	High Grade B Cell Lymphoma	0.16
3	T Cell / Histiocytic rich B Cell Lymphoma	0.22
4	Other Lymphoma (Hodgkins – Like but immuno odd)	0.02
5	DLBCL	0.08
6	Exemption claimed but not on file	0.08

Most popular diagnosis: Nodular lymphocytic predominant Hodgkin's Lymphoma

Reported Diagnosis: Nodular -lymphocyte predominant Hodgkin's Lymphoma

Case Number: I773 *Click here to view digital image*

Diagnostic category: Respiratory

Clinical : M34. Retroperitoneal mass, haemoptysis. CT - pulmonary mets ?sarcoma, very vascular. Raised serum HCG - (512,000)

Specimen : Right Lung

Macro : 3 x 18G cores (immediate haemoptysis ++). - CT right lung biopsy.

Relevant information on special stains/immunohistochemistry:
MNF116 positive. Subsequent IHC also showed Beta HCG positivity.

	Final Merges	Score
1	Choriocarcinoma	9.90
2	NSCLC – Giant Cell carcinoma	0.02
3	Pleomorphic liposarcoma	0.07

Most popular diagnosis: Choriocarcinoma

Reported Diagnosis: Choriocarcinoma

Case Number: I774 *Click here to view digital image*

Diagnostic category: Skin

Clinical : F71. Ruptured cyst on occiput

Specimen : Cyst

Macro : This specimen consists of a skin ellipse 15 x 11mm and to a maximum depth of 8mm bearing a raised domed shaped lesion 7mm x 5mm with some pigmentation on its surface. The cut section shows a possible 4-5mm diameter cyst below the domed structure. Two TSs in one cassette. Tissue retained.

	Final Merges	Score
1	(Proliferating) Tricholemmal / pilar cyst / tumour	9.23
2	(Proliferating) Epidermoid Cyst	0.29
3	Benign Cyst	0.07
4	Squamous cell carcinoma	0.11
5	Keratocanthoma	0.22
6	Benign adnexal tumour	0.07

Most popular diagnosis: (Proliferating) Tricholemmal / pilar cyst / tumour

Reported Diagnosis: Proliferating Tricholemmal Cyst

Case Number: I775 *Click here to view digital image*

Diagnostic category: Skin

Clinical : M19. Nodules extension surface right elbow.

Specimen : Elbow

Macro : Punch biopsy 4mm in diameter, 4mm deep.

	Final Merges	Score
1	Granuloma Annulare	9.63
2	Necrobiosis Lipoidica	0.10
3	Rheumatoid Nodule	0.27

Most popular diagnosis: Granuloma Annulare

Reported Diagnosis: Granuloma Annulare

Case Number: I776 *Click here to view digital image*

Diagnostic category: Breast

Clinical : F62. Warty lump over right nipple

Specimen : Nipple biopsy

Macro : Punch biopsy 4mm diameter.

	Final Merges	Score
1	Hidradenoma Papilliferum / Duct Adenoma	9.79
2	Papillary Adenoma	0.08
3	Chrondroid Syringoma	0.06
4	Syringomatous adenoma	0.07

Most popular diagnosis: Hidradenoma Papilliferum / Duct Adenoma

Reported Diagnosis: Adenoma of the nipple

THIS CASE HAS BEEN EXCLUDED FROM PERSONAL SCORES

Case Number: I777 *Click here to view digital image*

Diagnostic category: Gynae

Clinical : F50. Uterus, cervix and tubes.

Specimen : Fallopian Tube

Macro : Right fallopian tube 60mm with 12mm cyst and 4 mm fimbrial nodule.

	Final Merges	Score
1	Serous Cystadenofibroma (& paratubal cyst)	2.82
2	Adenofibroma	4.20
3	Paratubal Cyst	0.19
4	Salpingitis Isthmica Nodosa	1.77
5	Endosalpingiosis (+/- Cyst)	0.53
6	Adenomyona	0.15
7	STIC	0.08
8	Diverticulosis of fallopian tube	0.04
9	Endometriotic Nodule. Adjacent fimbrial Cyst	0.15
10	Adenomatoid tumour	0.07

Most popular diagnosis: Adenofibroma

Reported Diagnosis: Benign fimbrial adenofibroma

THIS CASE HAS BEEN EXCLUDED FROM PERSONAL SCORES

EDUCATIONAL CASE

Case Number: I778 *Click here to view digital image*

Diagnostic category: Lymphoreticular

Clinical : Male 7yrs. Splenomegaly.

Specimen : Spleen

Macro : Spleen: 200mm. 474g. Red pulp grossly expanded. No focal lesions.

Suggested diagnoses:

- Hypersplenism with congestive splenomegaly, benign.
- Massive congestion? Spherocytosis
- Congestive splenomegaly
- Hereditary spherocytosis
- Splenic infarcts ?spherocytosis
- Hypersplenism
- Haemophagocytic Syndrome
- Congestive splenomegaly
- Red pulp congestion, ? red blood cell abnormality, correlate with haematology
- Spherocytosis
- ?? Hairy cell leukaemia (need immuno)
- Hypersplenism (?spherocytosis)
- Congested red bulb ? Infection e.g. infectious mononucleosis. ?others
- Splenic sequestration
- HAEMOLYTIC ANAEMIA
- Histiocytosis
- Haemolytic anaemia
- Congestive splenomegaly
- REACTIVE
- Hypersplenism with red pulp expansion secondary to congenital spherocytosis
- Acute sinusoidal congestion
- Reactive lymphoid follicles abnormal in spleen
- Depletion of white pulp
- HEREDITARY SPHEROCYTOSIS
- Congestion
- Hereditary spherocytosis
- haematopoiesis/myelodysplasia
- Leishmaniasis
- Extra medullary haematopoiesis
- Congested +++ formalin pigment
- Haemolytic anaemia ?hereditary spherocytosis or sickle cell disease
- ? Spherocytosis – hereditary
- Portal hypertension
- Haematological disorder
- Haemocateresis
- Severe splenic congestion ?cause (Clinical correlation required)
- Congestive splenomegaly
- Expanded red pulp, congestion and pigment – Haemochromatosis
- Hypersplenism
- Haemorrhage? Blood disorder?
- Expanded red pulp, ? amyloid
- ?extramedullary haemopoeisis
- Autoimmune haemolytic anaemia
- Expansion of red pulp. No extra medullary haematopoiesis. Gaucher's and Hereditary spherocytosis need to be excluded.
- INFARCT
- TRAUMA
- Spherocytosis
- Congestive spleen
- Splenic hemangiomatosis
- Thalassemia haemolytic anaemia
- Sickle cell anaemia
- **CONSISTENT WITH HAEMOLYTIC ANAEMIA**
- Haemoglobinopathy-associated

• Severe congestion possibly due to portal hypertension • Idiopathic thrombocytopaenic purpura spleen • Hairy cell leukaemia • Vascular congestion of uncertain cause • Red Pulp Congestion • ?Haemolytic anaemia ?ITP • CONGESTION POSSIBLY SECONDARY TO TORSION - NEED MORE CLINICAL DETAILS • Red cell sequestration due to sickle cell disease • Red blood cell disease ?Spherocytosis • Splenic hamartoma • Congested spleen no apparent aetiology • Congestive splenomegaly • Haemorrhage • Splenic – hypersplenism, red pulp prominence. Hypoplastic white pulp lymphoid cells. ?autoimmune. Pigment present ?malaria. No sickle cells seen. Spherocytosis? • Red cell sequestration ?hereditary spherocytosis • Extramedullary	splenomegaly • Haemorrhage (ruptured spleen) • Infarction • Infectious mononucleosis • Black pigment, Kalazar fever; Leishmania donovani infection • Extramedullary haematopoiesis • Haemolytic anaemia (probably spherocytosis) induced splenomegaly • Congenital spherocytosis • Expanded red pulp, differential diagnosis includes storage disorder • Malarial parasite infection. • Primary immunodeficiency • Viral infection • Haemophagocytic syndrome • Infectious process/Infectious mononucleosis. • Autoimmune disorder. • Autoimmune haemolytic anaemia • **Exclude malaria** • Malaria

Reported Diagnosis: Spherocytosis

EDUCATIONAL CASE

Case Number: I779 *Click here to view digital image*

Diagnostic category: Respiratory

Clinical : F67. Left T4 lung cancer on CT. 4L lymph node. EBUS FNA of 4L mass.

Specimen : Lung

Macro : Multiple cream haemorrhagic core fragments measuring together 20 x 20mm.

Relevant information on special stains/immunohistochemistry:

Positive for P63 and CK5/6. Negative for TTF-1.

- Squamous cell carcinoma
- SCC
- Poorly differentiated squamous cell carcinoma
- Well/moderately differentiated squamous cell carcinoma
- Squamous cell carcinoma Mixed with ?Small Cell Carcinoma (CRUSHED hence no clear cytology)
- Squamous carcinoma
- Poorly differentiated squamous cell carcinoma
- Metastatic squamous cell carcinoma
- Metastatic squamous cell carcinoma to lymph node
- Squamous cell carcinoma in situ and ? invasive
- Metastatic non-small cell lung carcinoma
- MIXED SQUAMOUS CELL CARCINOMA/SMALL CELL CARCINO0MA
- Squamous cell carcinoma metaplastic carcinoma
- NSCLC – Basaloid squamous cell carcinoma
- Squamous cell carcinoma of lung
- G3 squamous cell carcinoma
- Poorly differentiate carcinoma , favour squamous cell carcinoma
- Squamous cell carcinoma And Possible small cell carcinoma
- Poorly differentiated squamous cell carcinoma with focal neuroendocrine differentiation
- Squamous cell carcinoma (metastatic)
- Basaloid Variant of Squamous Cell Carcinoma
- Basaloid squamous cell carcinoma
- Non-small cell carcinoma – Squamous cell carcinoma
- Mixed squamous and small cell carcinoma (IHC to confirm)
- carcinoma (?mixed small and non-small cell types)
- Possible small cell carcinoma(Immuno is needed to confirm/excluded Small cell element.
- **INVASIVE SQUAMOUS CELL CARCINOMA**
- Haemophagocytosis
- Spherocytosis
- Metastatic squamous cell carcinoma in lymph node, not lung. ? origin – breast; thymic; bladder
- Squamous cell carcinoma (metastatic as EBUS sample)
- Non-small cell carcinoma likely Squamous cell carcinoma
- Cores left lung : Squamous cell carcinoma

• Invasive squamous carcinoma • METASTATIC SQUAMOUS CELL CARCINOMA – FAVOUR PRIMARY LUNG ORIGIN GIVEN THE CLINICAL DETAILS • Non –small cell-poorly differentiated squamous cell carcinoma • Squamous cell carcinoma (includes bits of bronchus, airway cartilage and lymphoid – where from exactly? – if from 4L LN then metastatic/direct spread/ could be lung origin but not necessarily) • Metastatic carcinoma in a lymph node, squamous carcinoma / metaplastic carcinoma. – basaloid / metaplastic phenotype on IHC. Check for primary head and neck, breast and other sites. Also compatible with Lung primary non-small cell carcinoma, of squamous type, adeno/squamous cell carcinoma.	•

Reported Diagnosis: Poorly differentiated squamous cell carcinoma