

**Ghana and Nigeria National Diagnostic Histopathology EQA circulation 016 (For the
May 2019 TSL workshops). Mastersheet**

Part I: Dermatopathology:

1. Female 20 yrs. Lesion on forearm. **DIAGNOSIS:** Juvenile Xanthogranuloma vs extranodal Rosai-Dorfman
2. Male 62. Gluteal lesion. **DIAGNOSIS:** Pilomatriceal carcinoma
3. Female 35. Lumbar plaques. **DIAGNOSIS:** Lymphangioma circumscriptum.
4. Male 54. Lesion on face. **DIAGNOSIS:** Leishmaniasis
5. Female 9, albino. Groin lesion. **DIAGNOSIS:** Compound naevus
6. Female 30. Excoriated skin. **DIAGNOSIS:** Psoriasis
7. Male 32. Lesion on leg. **DIAGNOSIS:** Lichen planus
8. Female 32, skin biopsy. **DIAGNOSIS:** Pemphigus
9. Female 42. Umbilical biopsy. **DIAGNOSIS:** Endometriosis
10. Female 55. Lesion on trunk. **DIAGNOSIS:** Pemphigus vulgaris
11. Female 34, skin lesion biopsy. **DIAGNOSIS:** Seborrhoeic keratosis
12. Male 3, skin lesion biopsy. **DIAGNOSIS:** Xanthogranuloma
13. 20 yr old female. Excision of pigmented lesion lower back. **DIAGNOSIS:** cellular blue nevus.
14. 49 yr old male. Punch biopsy left leg/shin lesion. Clinically nodular prurigo.
DIAGNOSIS: nodular prurigo R/O lichen simplex chronicus
15. 34 yr old male, ? BCC back of neck. **DIAGNOSIS:** follicle based viral wart r/o early keratoacanthoma. Expert opinion = inverted follicular keratosis with associated pseudoepitheliomatous hyperplasia of hair follicle with an element of prurigo due to external trauma.
16. Excision of rapidly enlarging lesion on clavicle of 78 year old female. **DIAGNOSIS:** follicular type well-differentiated squamous cell carcinoma.
17. Male 85 yrs. Excision of squamous cell carcinoma from right frontal scalp.
DIAGNOSIS: well-differentiated trichilemmal carcinoma.
18. Lesion on right thigh of 41 yr old female. **DIAGNOSIS:** benign fibrous histiocytoma.
19. Punch excision of epidermoid cyst from the back of a 17 yr old female.
Immunohistochemistry shows that the lesional cells have strong uniform expression of CD10 and SMA with a low Ki-67 index that overall is less than 5%. They are negative with desmin, CD34, S100 protein and SOX10. **DIAGNOSIS:** Cellular Benign

fibrous histiocytoma. 19a = H/E, 19b = CD10, 19c = SMA, 19d = Desmin, 19e = CD34, 19f = S100.

Part II: soft tissue

20. Right groin mass in adult male with chronic intestinal obstruction secondary to intra-abdominal malignancy. Original histopathologic diagnosis – osteosarcoma. Second opinion requested. Immunohistochemistry – tumour cells express S100 and vimentin but are negative with CD45, desmin, cytokeratins (AE1/3, 34BE12), HMB-45, CD31, SMA. **DIAGNOSIS:** mostly likely epithelioid MPNST, things excluded – clear cell sarcoma, alveolar soft part sarcoma, ossifying fibromyxoid tumour, myoepithelial skin adnexal tumour, glomus tumour. 20a = H/E, 20b = EVG, 20c = ABPASD, 20d = S100, 20e = vimentin.
21. Recurrent posterior neck swelling in adult male. Immunohistochemistry – widespread patchy expression of S100, negative with desmin, myogenin and AE1/3. **DIAGNOSIS:** MPNST. 21a = H/E, 21b = S100.
22. Adult male, muscle mass. Original diagnosis of malignant mesenchymal tumour ? chondrosarcoma. Immunohistochemistry – uniform expression of vimentin, patchy expression of CD99 occasional cells S100 protein positive. **DIAGNOSIS:** 1 malignant (mesenchymal chondrosarcoma) and 2 benign (chondroblastoma and chondromyxoid fibroma) differentials to be distinguished by imaging rather than ihc or molecular. 22a = H/E, 22b = vimentin, 22c = S100, 22d = CD99
23. Right flank mass in 47 yr old female who began menstruating again after 19 months of amenorrhea. USS – hydronephrosis. Intra-op – mass attached to caecum, appendix, right ureter and right fallopian tube. Initial diagnosis of MPNST. Immunohistochemistry – fairly uniform expression of desmin, patchy expression of EMA, negative with myogenin AE1/3, S100, CD34, CD117 and Dog1. **DIAGNOSIS:** as long as surgeon is sure this is not uterine mass = well differentiated leiomyosarcoma. 23a = H/E1, 23b = H/E2, 23c = desmin, 23d = EMA,
24. Female 52 yrs. Pelvic (retroperitoneal) mass ?? Sarcoma. Patient is known hypertensive being managed for a pelvic mass which occurred 2 years post TAH and BSO. Immunohistochemistry - Tumour cells show strong uniform expression of CD56 but are negative with CD34, desmin, broad spectrum cytokeratins (AE1/3), S100, CD21, CD23 and CD68. **DIAGNOSIS:** ?? Post-operative (pseudo-sarcomatous) spindle cell nodule. For correlation with imaging and surgical findings otherwise consider fibrosarcoma. 24a = H/E, 24b = CD56, 24c = CD68

25. Female 24 yrs, sickle cell anaemia. Open reduction and internal fixation of pathologic fracture distal third of femur. No immunohistochemistry done.

DIAGNOSIS: Favour osteosarcoma over fracture callus because of 1) presence of necrosis 2) definite/marked cytologic atypia 3) absence of cartilage 4) absence of cellular rimming/entrapment of cells by osteoid material.