Answer Key Neoplasm Crossword Puzzle

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Across

4. **BOWENSDISEASE**—Aka “Squamous cell carcinoma-in-situ”; characterized by abnormal growth of keratinocytes (cells in the outermost layer of the skin-epidermis); appear as red, scaly patch or raised spots or warts; curable type of skin cancer but can spread to the deeper layers & other parts of the body

9. **MULTIPLEMYELOMA**—Type of neoplasm due to abnormal proliferation of plasma cells (cells developing from B lymphocytes involved in making antibodies to fight infections & diseases) preventing the bone marrow to make normal cells; 2nd most prevalent blood cancer; cause is unknown; common symptoms are characterized by the mnemonic **CRAB** (Calcium elevated, Renal failure, Anemia, Bone lesions); some tests include blood & urine electrophoresis, x-ray, bone marrow biopsy (diagnostic)

13. **HODGKINSDISEASE**—Type of malignant lymphoma; characteristic histologic finding is the “Reed-Sternberg cells”; some presenting s/s are fever, night sweats, abdominal pain, weight loss; treatment incl. radiotherapy (80% cure rate) & chemotherapy

15. **MELANOMA**—Type of cancer arising from melanocytes (cells producing melanin pigment in the skin); most dangerous, highly metastatic & leading cause of skin cancer; some risk factors include excessive sun or UV exposure, family history, & presence of atypical moles; early signs (which helps in the dx) are identified by the mnemonic **ABCD**’ (Asymmetry/Border/Color/Diameter/Evolution); 4 types: superficial spreading, nodular, lentigo maligna, & acral lentigious

17. **LIPOMA**—Benign tumor of the adipose tissue; characterized as slow-growing, non-painful, round, mobile mass(es), usually producing no symptoms requiring no treatment; often located in the subcutaneous tissue in the back, arms, shoulder, or neck but can also be found in deeper tissue – i.e. in the abdominal organs

18. **SARCOMA**—One of the major types of cancer arising from connective tissue such as bone (osteo-), cartilage (chondro-), muscle (rhabdo-), fat (lipo-), lymphoid tissue (lympho-); this is often malignant

19. **MERKELCELLCARCINOMA**—”Neuroendocrine cancer of the skin”; rare but highly aggressive type of cancer; appears as flesh-colored or bluish-red nodule usually in the face, head or neck; associated with prolonged sun-exposure or weak immune system; in most cases, is caused by a virus (Merkel cell Polyomavirus)

21. **HEMANGIOMA**—Benign tumor of the endothelial cells (cells lining the blood vessels); characterized by abnormal number & dilated blood vessels forming a mass in the skin or internal organs; usually appears at birth or early life; most common tumor in infants; common types are capillary, cavernous (venous), compound, plexiform (arterial)

22. **CARCINOMA**—One of the major types of cancer arising from epithelial cells (cells forming the lining of internal organs, glands, skin & cavities); can be ”in-situ” or may spread to adjacent or distant areas (“metastasis”)

23. **LYMPHOMA**—One of the major types of cancer residing predominantly in the lymphoid tissue; primarily involves the lymph node, spleen & bone marrow but may infiltrate any other organ or tissue; 2 major variants: Non-hodgkins & Hodgkins Disease; s/s include enlarged lymph nodes in the neck/axilla/grain, abdominal pain, fever, weight loss & night sweats

24. **FIBROADENOMA**—Most common benign neoplasm of the breast characterized as round, rubbery, painless, mobile, usually solitary but occasionally occurs as multiple masses; growth can be related to hormones; commonly enlarged rapidly during pregnancy & cease to grow after menopause

Down

1. **MULTIPLENEDOCRINEOPLASIA**—”MEN or MEA”; group of inherited disorders affecting the hormone-producing glands (endocrine system); can be benign or malignant; typically develops tumors in at least 2 endocrine glands but can also develop in other organs or tissues; forms (classified according to the hormones & symptoms produced) include: MEN Type I, Type 2a & b, Type 4

2. **TERATOMA**—”Germ cell tumor”; encapsulated (w/capsule) tumor containing components of tissues
or organs (derived from one or more of the three germ cell layers: ectoderm, mesoderm, & endoderm); although the tissues or organs are normal they are highly different from the surrounding tissue (i.e. - tumor can contain hair, teeth, bone, or cyst within its capsule); mature type is benign while the immature type is malignant

3. **NEUROFIBROMATOSIS**—Group of genetic disorders causing tumors in the nervous tissue (brain, spinal cord, nerves); usually benign but can be malignant in some cases; diagnosed by symptoms produced & genetic testing (in childhood & early adulthood); highest risk factor is the history of this disorder; types include: NF1 (VonReckinghausen), NF2, & Schwannomatosis

5. **POLYCYTHEMIAVERA**—Slow growing type of blood cancer resulting in abnormal production of all types of blood cells; rare disease due to a genetic mutation; complications like blood clots & bleeding, enlarged spleen occur with risk of developing to other disorders like acute leukemia; treatment incl. phlebotomy (to decrease blood thickness), & medications (chemotherapy)

6. **LEUKEMIA**—one of the major types of cancer arising from malignant transformation of blood-forming cells; starts primarily in the bone marrow & lymphoid tissue, then spread to the peripheral blood & other tissues; classified according to the cells involved (myeloid or lymphoid) & the history of the disease (acute or chronic); 4 main types: Acute & Chronic Myelocytic / Myelogenous (AML, CML) and Acute & Chronic Lymphocytic (ALL, CML)

7. **CARCINOIDTUMOR**—Tumor arising from neuroendocrine cells (cells performing nerve & endocrine functions) throughout the body; characterized as slow growing, produce & release hormones (i.e.-cortisol, histamine, insulin) causing symptoms (i.e.- diarrhea, flushing, abdominal pain); most varied & common in the GIT, pancreas & lungs

8. **MENINGIOMA**—Tumor arising from the meninges (membrane surrounding the brain & spinal cord); most common type of primary brain tumor; majority are benign but can be malignant; symptoms produced & treatment depend on their location

10. **TUMORMARKER**—An abnormality specific for a particular type of malignancy that can be detected in the body; uses include (1) diagnose & screen high risk individuals for the presence of malignancy, (2) monitor effectiveness of treatment, & (3) early detection of recurrence; i.e.- PSA (Prostate Specific Antigen for Prostate CA), hCG (human Chorionic Gonadotropin for Trophoblastic tumors), CEA (CarcinoEmbryonic Antigen for GI Tumors)

11. **CARCINOMAINSITU**—Cancer that has stayed in the place where it was first found & has not spread or metastasized; cancer in its "earliest stage"

12. **LEIOMYOMA**—Benign soft tissue tumor usually arising from smooth muscle; most common in the uterus (known as "fibroids"); but can be found other organs; characterized as firm, well-circumscribed, painful lesion(s)

14. **MESOTHELIOMA**—Malignant neoplasm arising from the mesothelium (membrane lining the cavities of the body, i.e. - chest (pleura-most common), abdomen (peritoneum), heart (pericardium); related to prolonged asbestos exposure (> 30 years later); s/s produced are related to the area of the body involved

16. **KAPOSISARCOMA**—Malignant tumor derived from endothelial cells; caused by an interaction between a weakened immune system, HIV and the human herpesvirus-8 (HHV-8); lesions involve the skin, mucosal surfaces, lymph nodes, visceral organs, or anywhere in the body; 4 types: epidemic AIDS-related, immunocompromised, sporadic / classic, & endemic / African

20. **CHORIOCARCINOMA**—“Gestational Trophoblastic Neoplasia or Trophoblastic Tumor”; fast growing type of cancer originating from the trophoblastic cells (cells which help the embryo attach to the uterus & help in the formation of placenta) that occurs in the uterus during pregnancy (spontaneous or ectopic) or other pregnancy-related conditions (like H-mole); serial serum hCG levels are used to monitor effectiveness of treatment; main type of treatment is chemotherapy