



Lesson 3

T, N, M Categories Used to Describe the Cancer Involvement



- Categories are used to describe the cancer
- Anatomic extent or involvement by cancer is the foundation
- Additional non-anatomic factors as proven necessary
- Defined and modified based on
 - Clinical data
 - Biological properties
 - Anatomic site, tissue structure
 - Histologic type
 - Prognostic information for outcomes and survival

- Category
 - Refers to tumor, nodes, and metastasis
 - Also refers to each of the T's, N's and M's

- For example, T2 is a category
 - Includes multiple criteria such as size and extent
 - T2 is not considered a value
 - Value would be the size, extension, etc, that makes up the criteria
 - AJCC does not use the word “value”

- **T**umor – primary tumor
- Criteria for the category include
 - Size of the cancer
 - Contiguous spread or extension
- Varies by anatomic site
- Important to understand anatomy
 - Different tissue layers of the site
 - Landmarks and named parts of the site
 - Relationship to neighboring organs and structures

- **N**ode – regional draining lymph nodes
- Criteria for the category include
 - Absence or presence of cancer
 - Extent of cancer
 - Number of nodes involved
 - Location of nodes involved
- Varies by anatomic site
- Important to understand anatomy
 - Location of lymph nodes including ipsilateral & bilateral
 - Structure of nodes
 - Terminology: extracapsular, matted, totally replaced nodes where the nodal architecture is no longer evident

- **M**etastasis – distant metastasis
- Criteria for the category include
 - Presence or absence of cancer
 - Involvement of
 - Sites and/or organs outside the local tumor area
 - Location and volume
- Varies by anatomic site
- Important to understand anatomy
 - How cancer spreads by
 - Vascular channels
 - Lymphatics beyond the defined regional nodes
 - Different risk based on
 - Organs involved
 - Organ structure involved – capsule vs. parenchyma

- Other categories are required for some sites
 - Used with T, N, and M
 - Level of importance equal to those categories
- Categories include
 - Histology
 - Age
 - Location
 - Grade
 - Mitotic rate
 - Prognostic scoring index
 - PSA
 - Gleason
 - Serum marker
 - ER, PR, HER2
 - Heritable Trait
 - Peripheral blood involvement

Chapters Utilizing Additional Categories

- 16. Esophagus & Esophagogastric Junction
 - Histology, Grade, Location
- 19. Appendix- Carcinoma
 - Grade
- 38. Bone
 - Grade
- 41. Soft Tissue Sarcoma of Trunk and Extremities
 - Grade
- 43. Gastrointestinal Stromal Tumor
 - Mitotic Rate
- 44. Soft Tissue Sarcoma of the Retroperitoneum
 - Grade
- 48. Breast
 - Grade, HER2, ER, PR
- 54. Corpus Uteri Sarcoma
 - Histology
- 56. Gestational Trophoblastic Neoplasms
 - Prognostic Scoring Index
- 58. Prostate
 - PSA, Grade
- 59. Testis
 - Serum Marker
- 68. Retinoblastoma
 - Heritable Trait
- 73. Thyroid- Differentiated and Anaplastic Carcinoma
 - Age Histology
- 81. Primary Cutaneous Lymphomas
 - Peripheral Blood Involvement



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Thank You