Pathology Position paper: of Retroperitoenal Sarcomas

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DISCLOSURES

Nothing to disclose

Pathology Position Paper for Retroperitoneal Sarcomas

Participants

- Pathologists:
  - Bibianna Purgina (lead) – The Ottawa Hospital/EORLA (Canada)
  - Catherine Mitchell – Peter MacCallum CC (AUS)
  - Sungmi Jung – McGill U (Canada)
  - Evita Henderson-Jackson – Moffit CC (USA)
  - Eva Wardelmann – Gerhard-Domagk-Institute of Pathology (Germany)
  - Salvatore Lorenzo Renne – Humnaitas U (Italy)
  - Khin Thway – Royal Marsden (UK)
  - Brendan Dickson – Mount Sinai (Canada)
- Surgical Oncologists and Oncologists:
  - David Gyorki - Peter MacCallum CC (AUS)
  - Carolyn Nessim – The Ottawa Hospital (Canada)
  - Marco Fiore - Istituto Nazionale dei Tumori (Italy)
  - Alessandro Gronchi - Istituto Nazionale dei Tumori (Italy)

Paper Outline

Working Title: Pathologic Assessment Of Retroperitoneal Sarcomas: A Position Paper By The Transatlantic Australasian Retroperitoneal Sarcoma Working Group.

- Background
- Defining Anatomic Region of the Retroperitoneal Space
    - Relevant for pathologic assessment of specimen
- Diagnosis requirements:
    - Imaging
    - Adequacy of biopsy specimens
        - Minimal macroscopic criteria (based on criteria summarized by Dr. Khin Thway)
        - Rationale for biopsy
    - Macroscopic assessment of en bloc resections
    - Margins:
        - Accepted and controversial margins

Paper Outline

- Diagnosis requirements (continued):
  - Sampling
    - Gross estimate of tumour necrosis and/or treatment effect
    - Number of sections per margin
  - Microscopic assessment:
    - Main sarcoma subtypes – LPS (and variants), LMS, MPNST, UPS, SFT, etc
    - +/- dediff component - Which component at involved margin?
    - Role of ancillary studies
      - Confirming diagnosis – if classic features of LPS, do we need molecular confirmation?
      - Immunohistochemistry → protein correlates of molecular genetic alterations (amplifications, mutations, fusions, etc).
        - Ex. Immunostains for MDM2, beta-catenin, STAT6, H3K27me3, SMARCB1 (INI1), etc
        - Ptifalls of immunostains: MDM2 immunostain may stain histiocytes, endothelial cells, STAT6 false positive in LPS
      - Smooth muscle differentiation in LPS
    - Risk Stratification Model for SFTs (Demicco)

Paper Outline

- Reporting:
  - Synoptic (CAP protocols)
  - Grading:
    - Controversial in some STS ie. MPNST

Difficult Concepts/Poor Consensus

- Anticipated challenges achieving consensus:
  - What are true margins in RPS?
    - Tumour capsule yes/no
    - Will require collaboration with surgical colleagues
  - Grading of specific sarcoma subtypes:
    - Ie. MPNST

Difficult Concepts/Poor Consensus

- Current Status:
  - Rough draft and paper outline has been circulated to participants (End of Sept 2022)
    - Awaiting feedback
  - Conference call in early 2023:
    - With Surgeons regarding margin status
  - Anticipated completion: late 2023.