

MANAGEMENT OF HEAD AND NECK PRIMARY UNKNOWN SQUAMOUS CELL CARCINOMA USING COMBINED PET-CT AND TRANSORAL LASER MICROSURGERY

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BACKGROUND: The unknown primary of the neck is commonly encountered by the head and neck surgeon. Despite the exhaustive diagnostic tools employed in traditional detection protocols, many unknown primaries are not found and the patient is subjected to wide field radiation and chemotherapy during treatment. Localizing the primary tumor has demonstrated therapeutic benefits, improved quality of life and overall survival. The authors' objective was to determine the efficacy of a new management protocol for unknown primaries of the head and neck.

METHODS: Our technique involved a preoperative PET-CT followed by a planned surgical TLM approach. Efficacy was assessed based on survival statistics, disease control, detection rates, the proportion of patients not receiving adjuvant therapy, and the proportion of PET-CTs helpful for detection of the primary cancer.

RESULTS: The occult primary was located in twenty-five of the twenty-seven patients (93%), with the majority found in the palatine tonsil (52%). Both overall survival and disease specific survival was 80% at 36 months. Local control was achieved in 100% of patients. After surgery, 37.0% (n=10) received adjuvant radiation alone and 33.3% (n=9) of patients went on to receive adjuvant chemoradiation. On imaging, 72% (n=18) of PET-CT scans correctly localized the primary tumor.

CONCLUSIONS: Occult head and neck primaries present a diagnostic challenge which is not adequately overcome using traditional detection protocols. The current study presents our unique protocol at Dalhousie University which demonstrates the efficacy of the PET-CT TLM protocol from both a detection and therapeutic perspective.