HUBUNGAN ANTARA STADIUM TUMOR PRIMER DAN LIMFONODI METASTASIS MENGGUNAKAN MODALITAS CT SCAN DENGAN TIPE HISTOPATOLOGI PADA PASIEN KANKER NASOFARING

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INTISARI

Latar Belakang: Karsinoma nasofaring memiliki angka morbiditas dan mortalitas tinggi di negara-negara Asia Tenggara, termasuk Indonesia. Pemeriksaan radiologi berperan penting dalam tahap diagnosis dan penentuan stadium penyakit, khususnya dalam penentuan *staging* menggunakan klasifikasi TNM. Diduga hasil penentuan stadium TNM akan berhubungan dengan temuan histopatologi, tetapi beberapa penelitian sebelumnya menunjukkan hasil yang kontradiktif.

Tujuan: Mengetahui hubungan antara stadium tumor primer dan limfonodi metastasis menggunakan modalitas CT scan dengan subtipe histopatologi pada pasien karsinoma nasofaring.

Metode: Penelitian analitik observasional dengan desain *cross sectional* secara retrospektif. Stadium tumor primer dan limfonodi metastasis dinilai berdasarkan modalitas CT scan, sedangkan subtipe histopatologi dinilai secara mikroskopis.

Hasil: Penelitian terhadap 88 orang (64,8% laki-laki dan 36,4% berusia 41-50 dan 51-60 tahun) menunjukkan bahwa pada limfonodi metastasis yang termasuk N2-N3, mayoritas (88,9%) memiliki subtipe histopatologi *non-keratinizing undifferentiated*, sedangkan pada limfonodi metastasis yang termasuk N0-N1, mayoritas (42,9%) memiliki subtipe histopatologi selain *non-keratinizing undifferentiated* (p = 0,008). Limfonodi metastasis yang lokasinya di bawah krikoid dan diameter *short axis* ≥ 1 cm secara signifikan lebih banyak ditemukan pada subtipe histopatologi *non-keratinizing undifferentiated* (p = 0,024 dan p = 0,039). Sementara itu, tidak terdapat perbedaan proporsi karakteristik nekrosis sentral dan perluasan ekstra-kapsular antar subtipe histopatologi (p = 0,515 dan p = 0,506). Baik pada stadium tumor primer T3-T4 maupun T1-T2, mayoritas memiliki subtipe histopatologi *non-keratinizing undifferentiated* (masing-masing 86,8% dan 82,9%; p = 0,611).

Kesimpulan: Terdapat hubungan antara limfonodi metastasis yang diidentifikasi menggunakan modalitas CT scan dengan subtipe histopatologi pada pasien karsinoma nasofaring. Sementara itu, tidak terdapat hubungan antara stadium tumor yang diidentifikasi menggunakan modalitas CT scan dengan subtipe histopatologi pada pasien karsinoma nasofaring

Kata Kunci: karsinoma nasofaring; klasifikasi TNM; limfonodi metastasis

THE RELATIONSHIP BETWEEN PRIMARY TUMOR STAGE AND LYMPH NODE METASTASIS USING CT SCAN MODALITY WITH HISTOPATHOLOGICAL TYPE IN NASOPHARYNGEAL CANCER PATIENTS

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ABSTRACT

Background: Nasopharyngeal carcinoma has high morbidity and mortality rates in Southeast Asian countries, including Indonesia. Radiological examination plays an important role in the diagnosis and staging of the disease, especially in determining staging using the TNM classification. It is suspected that the results of determining the TNM stage will be related to histopathological findings, but several previous studies have shown contradictory results.

Objective: To determine the relationship between the stage of the primary tumor and metastatic lymph nodes using CT scan modality with histopathological subtypes in patients with nasopharyngeal carcinoma.

Method: Observational analytical study with a retrospective *cross-sectional* design. The stage of the primary tumor and metastatic lymph nodes was assessed based on CT scan modality, while the histopathological subtype was assessed microscopically.

Results: A study of 88 people (64.8% male and 36.4% aged 41-50 and 51-60 years) showed that in metastatic lymph nodes included in N2-N3, the majority (88.9%) had a histopathological subtype of *non-keratinizing undifferentiated*, while in metastatic lymph nodes included in N0-N1, the majority (42.9%) had a histopathological subtype other than *non-keratinizing undifferentiated* (p = 0.008). Metastatic lymph nodes located below the cricoid and short axis diameter ≥ 1 cm were significantly more common in the *non-keratinizing undifferentiated* histopathological subtype (p = 0.024 and p = 0.039). Meanwhile, there was no difference in the proportion of central necrosis characteristics and extra-capsular extension between histopathological subtypes (p = 0.515 and p = 0.506). Both in primary tumor stages T3-T4 and T0-T2, the majority had *non-keratinizing undifferentiated* histopathology subtype (86.8% and 82.9%, respectively; p = 0.611).

Conclusion: There is a relationship between metastatic lymph nodes identified using CT scan modality and histopathology subtype in nasopharyngeal carcinoma patients. Meanwhile, there is no relationship between primary tumor stage identified using CT scan modality with histopathology subtype in nasopharyngeal carcinoma patients

Keywords: nasopharyngeal carcinoma; TNM classification; metastatic lymph nodes