Patterns of Nodal Metastases in Head and Neck Cancers: Literature Review

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BACKGROUND & OBJECTIVES

- Each head and neck cancer has a unique pattern of cervical lymph node metastasis¹. This has a vital impact on defining prognosis and influencing intensity of treatment.
- This literature review explores the various patterns of nodal spread for each cancer subtype.

METHODS & MATERIALS

- Established search databases were used between the dates of March and August 2017.
- English language literature regarding the epidemiology, pathophysiology and patterns of cervical metastasis was derived from prominent journals.

RESULTS

Figure 1: Nodal metastasis by neck level (I to VI) for each head and neck cancer¹⁻⁵. Diagram adapted from Sivanandan and Soo⁵.

Cancer	Neck Levels Involved	Neck Dissection
Oral	I, II, III	Supraomohyoid (I, II, III)
NPC	II, III, IV	Lateral (II, III, IV)
OPSCC	II, III, IV	Lateral (II, III, IV)
HPSCC	II, III, IV	Lateral (II, III, IV)
Laryngeal	II, III, IV	Lateral (II, III, IV)
Thyroid	II, III, IV, VI	Therapeutic (VI) Elective (II, III, IV)
Salivary (Major)	I, II, III	Supraomohyoid (I, II, III)
Salivary (Minor)	Rare	Rarely necessary

CONCLUSION

- There is indeed a **characteristic pattern** of metastatic spread for each head and neck cancer¹⁻⁵. Neck levels that are most commonly involved for each subtype are tabulated, along with recommendations for the intensity of neck dissection.
- This review also found that **tumour staging** correlates with the incidence of metastasis in most cancer subtypes, with the exception of naso- and hypo-pharyngeal cancers^{1,3,4}.

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