Effective and Efficient Diagnosis of Adult Patients with Cervical Lymphadenopathy: A Primary Care Provider's Checklist

An Ontario Health (Cancer Care Ontario) Resource

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Background

Cervical lymphadenopathy (CL) in adults, an increasingly common and impactful concern, poses diagnostic challenges due a broad differential diagnosis and confusion regarding the ideal diagnostic approach. The Cancer Care Integration and Disease Advisory Program (CI-DAP) from Ontario Health (Cancer Care Ontario), in conjunction with an expert working group, developed the CL in Adults Pathway Map[1] and Checklist as diagnostic resources for primary care providers. These resources offer an evidence-based strategy to streamline investigation, optimize resource use, and ensure timely, appropriate referrals for improved patient outcomes.

Patient problem:

- ❑ **Cervical lymphadenopathy** – enlarged lymph nodes in the neck

Initial Identification

Initial identification:

- ❑ Asymptomatic or incidental finding on imaging for unrelated issue, or
- ❑ Clinical presentation (e.g. palpable neck mass).
  - ➢ If considered urgent (e.g. neck mass is rapidly increasing in size or signs of airway compromise), refer urgently to the emergency room or surgeon.

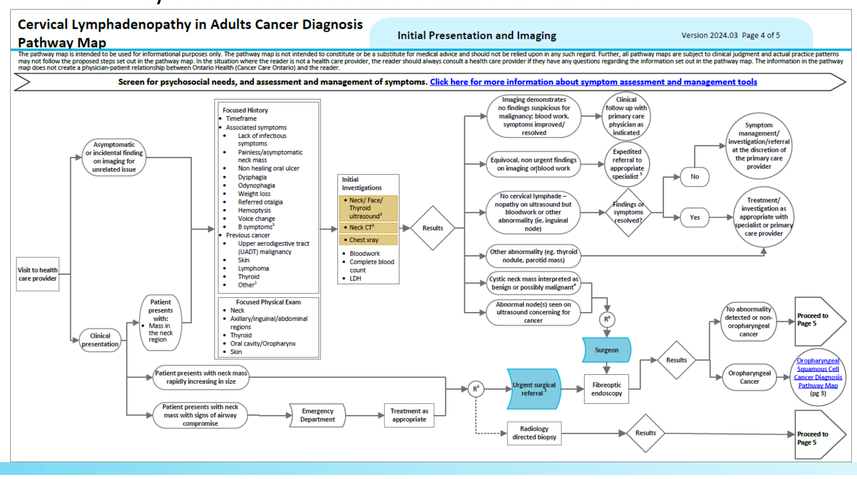
Initial Assessment by Primary Care

Begin with a detailed history and physical examination focusing on associated symptoms and previous cancer, including:

- ❑ **Timeframe:** malignant lesions will typically persist and enlarge over weeks to months.
- ❑ **Symptoms**: Lack of infectious symptoms, painless/asymptomatic neck mass, non-healing oral ulcer, dysphagia, odynophagia, weight loss, referred otalgia, hemoptysis, voice change, B symptoms (e.g. weight loss of greater than 10% of body mass, drenching night sweats, and/or fevers not explained by infection. The lack of B symptoms does not rule out cancer, including lymphoma).
- ❑ **History of previous cancer**: Upper aerodigestive tract (UADT) malignancy, skin, lymphoma, thyroid, or other cancers that can present as a neck mass (e.g. breast, lung, ovarian and other select cancers).
- ❑ **Focused Physical Exam:** Neck, axillary/inguinal/abdominal regions, thyroid, oral cavity/oropharynx, and skin.

Initial Investigations: Imaging and Bloodwork

- ❑ Ultrasonography of the neck/face/thyroid is heavily favoured over a neck CT scan as the initial imaging modality. Chest Xray is also an optional imaging modality, but less favoured.
- ❑ Bloodwork - helpful in the diagnosis of lymphoproliferative disease:
  - ➢ complete blood count to rule out anemia, thrombocytopenia, white blood cell abnormalities
  - ➢ LDH may be elevated due to increased cell turnover.



Clinical Strategy Based on Results – When to Refer

Primary Care to continue treatment/management when:

- ❑ Imaging results demonstrate no findings suspicious for malignancy and when blood work, symptoms improved/ resolved.

At Primary Care's discretion to manage/investigate/refer to a specialist when:

- ❑ Results indicate no cervical lymphadenopathy on ultrasound but bloodwork or other abnormality (ie. inguinal node)
- ❑ Results indicate other abnormality (e.g. thyroid nodule, parotid mass)

Refer to appropriate specialist when:

- ❑ Equivocal, non urgent findings on imaging or blood work → Expedited referral to appropriate specialist (within 4-6 weeks).
- ❑ Cystic neck masses can be benign or malignant→ surgical referral is recommended.
- ❑ Abnormal node(s) seen on ultrasound concerning for cancer → refer to surgeon; if access to surgical consultation may be a challenge, consider ultrasound guided biopsy.

Following Surgical Referral

Following a fiberoptic endoscopy and exclusion of oropharyngeal cancer, the recommended histologic/ cytologic and pathology results support surgeons in categorizing findings into benign, inconclusive, or malignant. This enables targeted diagnostic workups and appropriate referrals for treatment.

Conclusion

Integrating the CL diagnostic resources into primary care practices has the potential to transform how CL is managed, leading to a more streamlined approach for the healthcare system and most importantly, patients.

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1. The CL in Adults Pathway Map can be accessed at: https://www.cancercareontario.ca/sites/ccocancercare/files/assets/CLAinAdultsPathwayMap.pdf
2. The AFHTO on-demand presentation titled "Effective and Efficient Diagnosis of Adult Patients with Cervical Lymphadenopathy" can be found at the following link: https://www.afhto.ca/2024-demand-sessions

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