

CHAPTER 10 SURGICAL BIOPSY IN LYMPHOMA

An adequate diagnosis of lymphoma often requires careful assessment of nodal architecture in addition to assessment of cytologic abnormality.

An incisional biopsy may provide only a glimpse of architecture, limiting interpretation. Therefore, where possible, the surgeon should biopsy the most clinically significant site, and attempt to remove an intact lymph node.¹ This should be done with as little disruption of the lymph node as possible, to allow maximum pathological assessment of nodal architecture. Where excision of an intact lymph node is not considered safe or practical, the surgeon performing an incisional biopsy must be aware of the need to provide an adequate wedge of viable tissue that includes the nodal capsule, and wherever possible, the cortex, paracortex and medulla of the lymph node. Piecemeal excision should be avoided. To minimise surgical disruption of nodal architecture, the incisional biopsy should be made with a cold scalpel rather than diathermy.²

Tissue samples should be sent fresh and expeditiously to a pathology laboratory with appropriate expertise (see Section 4.3.1). The laboratory should be informed beforehand. Surgery should therefore be scheduled during normal working hours wherever possible, to optimise specimen processing.^{1,2}

When peripheral lymphadenopathy is absent, mediastinoscopy, thoracotomy or laparotomy may be required to access tissue for diagnosis. Endoscopic techniques may provide adequate surgical access, with much reduced morbidity. Video-assisted thoracoscopy is widely used for access to intrathoracic pathology. Despite technical challenges, the laparoscopic approach is finding increasing acceptance in assessment of abdominal lymphoma.³⁻⁵ Irrespective of the surgical approach, the principal requirement of surgical biopsy remains the reliable provision of a diagnostic tissue sample.

CT or ultrasound-guided core biopsies can be used to obtain biopsies where peripheral lymph nodes may be clinically normal.⁶⁻⁹ Such biopsies allow minimal assessment of architecture, but risk incorrect diagnoses due to inadequate sampling. This should be balanced against the morbidity of open surgical procedures.

Approximately one third of cases of non-Hodgkin's lymphoma in adults present at extranodal sites.¹ It is important for surgeons to remember to provide adequate tissue samples from such extranodal sites for lymphoma protocol studies.

Guideline — Surgical biopsy	Level of evidence	Refs
Surgical biopsy should be of the most clinically significant site. The surgeon should attempt to remove an intact lymph node.	IV	1
If an incisional biopsy is performed, trauma to the nodal architecture should be minimised.	IV	2
An appropriate laboratory should be informed before the biopsy, and specimens should be sent fresh and expeditiously.	IV	1, 2

10.1 References

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