Lymph Node Sampling Techniques

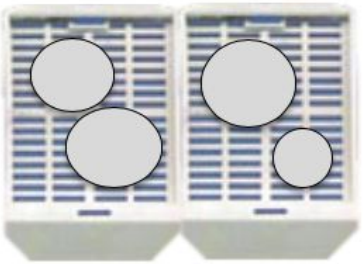
(13.5 Sampling_Techniques_Lymph_Nodes); Updated August 11, 2019 by Jeremy Deisch, MD

Lymph Node Dissections – When submitting lymph nodes, there are several key points to remember.

1. Often, small firm areas that are thought to be lymph nodes turn out to be peripheral nerves, appendices epiploica, tumor fragments, or blood vessels. To avoid having a discrepancy between how many nodes are found grossly and how many are found by histologic examination, dictate the number of lymph nodes as "lymph node candidates". This keeps the pathologist from having to change your gross when the number found histologically and grossly in the report do not match.
2. Lymph nodes are difficult to fix properly. Small lymph nodes (those 0.5 cm or smaller) can be submitted whole. However, the fibrous capsule surrounding the lymph node must at least be "nicked" with your scalpel to allow proper processing. Larger nodes must be serially sectioned perpendicular to the long axis for thorough analysis.
3. Nodes that are large and **grossly positive** (with firm, gritty cut surfaces) **do not always need to be entirely submitted for histology**. Dictate the size of the possible lymph node tumor and submit representative sections (after consulting with PA/pathology staff).
4. The number of lymph nodes and their status for the lymph node count must be indicated in the dictated block key. The number of nodes that are involved by tumor (as well as the size of the metastatic tumor and localization of the involved nodes) are critical data points for determining the AJCC pathologic nodal stage (pNX). The total number of lymph nodes is also a critical data point for surgical quality monitoring. Hence, the minimum number of lymph nodes for many specimens is set by the relevant governing bodies. Below are the acceptable methods of submitting lymph node candidates and document the block key. **Do not submit multiple "extras" for multiple bisected lymph nodes**. PA students have been chastised at other hospitals for this practice, as it is not widely practiced or accepted at other institutions.

- One medium lymph node, bisected
- Node Count: 0/1

Block Key:
A1: One lymph node, bisected

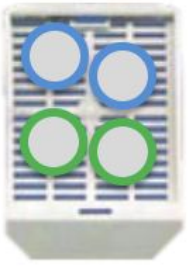


- One large lymph node, serially sectioned
- Node Count: 0/1

Block Key:
A1, A2: One lymph node, serially sectioned

- Six small lymph nodes, submitted whole
- Node Count: 0/6

Block Key:
A2: Multiple lymph nodes, for count



- Two medium lymph nodes, submitted in one cap
- Must be differentially inked
- Node Count: 0/2

Block Key:
A1: Two lymph nodes, differentially-inked