Title:	Sentinel Lymph Node Policy		
Department/Service Line:	Laboratory		
Approver(s):	CLIA Director		
Location/Region/Division:	NTX		
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SCOPE

This policy applies to departments in the NTX Baylor Scott and White Health System that obtain samples for Anatomic Pathology processing and diagnosis.

DEFINITIONS

Sentinel lymph node: Sentinel lymph node biopsy is an alternative staging procedure. The sentinel lymph node postulate is that tumor cells migrating from the primary tumor colonize one or a few lymph nodes before colonizing subsequent lymph nodes. Patients with operable breast cancer or melanoma have Tc-99 sulphur colloid and /or blue dye injected around their tumors 1-6 hours preoperatively. Patients then undergo gamma probe identification of sentinel lymph node(s) at the time of surgery Accurate interoperative diagnosis of sentinel lymph node malignancy facilitates complete lymph node dissection at the time of initial surgery. The capability to address both the primary tumor and metastatic disease in a single procedure offers several advantages.
Technetium-99: Radioisotope used with Sentinel Lymph node procedure.

POLICY

It is the policy of NTX BSWH Laboratory (BHCSL)

- To implement procedures to ensure the safe handling of any pathologic material know to contain radioactive substances.
- To comply with BSWH Radiation Safety Policies and procedures.
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PROCEDURE

For Surgical Specimens Containing Technetium-99

1. Specimens must be transported and stored in a container labeled with the appropriate patient identification. No additional labeling regarding radiation is necessary.
2. Procedures for handling these specimens follow Universal Precautions. Personal protective equipment is utilized when handling specimens (lab coat, face shield, and gloves).
3. Contaminated PPE and disposable items such as under pads and paper towels are discarded with other biohazard waste immediately following examination of radioactive specimens.
4. Contaminated scalpel blades are immediately discarded into the appropriate sharps container. In order to prevent the spread of contamination, other instruments are cleaned and disinfected in the usual manner with a disinfecting solution before reuse.
5. If a Frozen Section is performed, all tissue shavings are gathered from the cryostat chamber and discarded as biohazard waste. Tissue samples are placed in cassettes and processed in the usual manner.
6. Residual tissues are placed in formalin in a secure, labeled container and immediately filed into storage. These specimens are held for the usual retention period and discarded with the other tissues as biohazard waste.

Notes

1. Sentinel Lymph Node specimens are the only specimen type received which may contain radioactive material. Should another procedure producing a specimen containing radioactive material be sent to the Pathology department for examination, the Radiation Safety Officer will monitor the specimen to determine the best course of action to allow safe pathologic examination.
2. The need for monitoring individual samples is determined by the Radiation Safety Officer. Samples measuring greater that 2mR/hr at the surface of the sample container will be labeled with radioactive warning tape. These samples may be stored in pathology for 24-48 hours prior to examination by the pathologist.
3. The usual radioisotope for this procedure Tc-99m. If another isotope is employed, pathology will be informed of the time needed to store a particular sample for decay.
4. Nuclear Medicine will inform the Radiation Safety Officer if radioactive material other than Tc-99 is ordered for this procedure
5. If additional instruction is needed beyond that already provided, the Radiation Safety Office will provide such additional training.

ATTACHMENTS

None.

RELATED DOCUMENTS

Radiation Safety (BSWH.RAD.SAF.001.P)

REFERENCES

Recommendation for Handling Radioactive Specimens Obtained by Sentinel Lymphadenectomy, The American Journal of Surgical Pathology, 24(11): 1549-551

REVISION HISTORY

Version #	Effective Date	Description of Change	Revised By	Removed Date
2	See signature	New format		