香港浸信會醫院
Hong Kong Baptist Hospital

Sentinel Lymph Node Excision / Biopsy

Procedure Information Sheet

Introduction

Sentinel lymph node is defined as the first drainage axillary lymph node that drains the area of breast cancer. If the breast cancer cells have already invaded the lymphatic system, the sentinel lymph node is more likely than others to contain cancer cell.

Indication

Breast Cancer.

The Operation / Procedure

1. The operation is performed under general anaesthesia.
2. Sentinel lymph node excision/biopsy is usually carried out at the same time as breast conserving surgery or simple mastectomy.
3. To identify the sentinel lymph node(s)
   ➢ Before or during the surgery, radioactive isotope, blue dye, indocyanine green or superparamagnetic iron oxide is injected into the breast.
4. If breast conserving surgery is performed, a separate skin crease incision in the axilla may be created.
5. After excision of the sentinel lymph node(s), it is usually sent for intraoperative frozen section.
6. If the frozen section preliminary report shows there is no obvious cancer spread, the procedure is completed. If the frozen section preliminary report shows there is obvious cancer spread, axillary dissection will be performed.
7. Axillary dissection may be required if no sentinel lymph nodes can be identified during the procedure.
8. A second operation for axillary dissection may be necessary if the final pathology subsequently confirms presence of cancer spread (false negative).

Before the Operation / Procedure

1. Skin preparation: shower or bathe and wash your hair before your surgery.
2. If radioactive isotope is used, the injection is performed before your surgery at the Nuclear Medicine Department and confirmed by lymphoscintigraphy. The procedure takes approximately 1 to 2 hours.

After the Operation / Procedure

Same as Mastectomy or Breast Conserving Surgery.

Risk and Complication

1. If blue dye or superparamagnetic iron oxide is used, discoloration of skin may persist.
2. If blue dye is used, your urine may be stained green and usually clears up in 2 days.
3. Radioisotope carries a small amount of radioactivity. Potential harm to the human body is minimal. Most of the material will be removed with the specimen and residual radioactivity remaining in the body is minimal after the operation.
4. There is a rare possibility of hypersensitivity.
5. Wound pain
6. Wound infection
7. Bleeding (may require re-operation to evacuate the blood clot)
8. Hypertrophic scar and keloid formation may result in unsightly scar
9. Lymphoedema (though possible but much less frequent compared with axillary dissection)
10. Nerve injury including long thoracic nerve, thoracodorsal nerve and rarely brachial plexus (though possible but much less frequent compared with axillary dissection)
11. Injury to the vessels (though possible but much less frequent compared with axillary dissection)
12. Frozen shoulder and chronic stiffness (though possible but much less frequent compared with axillary dissection)

Patient's Label
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13. Numbness over axilla (though possible but much less frequent compared with axillary dissection)
14. Seroma (though possible but much less frequent compared with axillary dissection)

Alternative Treatment / Investigation

Axillary lymph node dissection/clearance

Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

Reference

1. Smart Patient Website by Hospital Authority: Sentinel Lymph Node Dissection (2020)
2. Specialty Advisory Group (Breast) by Hospital Authority: Sentinel Lymph Node Biopsy (2021)

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Patient's Signature:_____   Date:_____