Lumpectomy (Wire Localized and Seed Localized)

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Meenakshi Rajan, Savannah Moon, and Cassann Blake

Preference Card

- Drapes: minor laparotomy sheet, ¾ sheets × 3
- Sutures: 3-0 Vicryl, 4-0 Monocryl
- Medications: 1% and 0.5% Marcaine in a 50/50 mixture
- Equipment: mastectomy set, #15 blade scalpel, Neoprobe and cover, electrocautery (set 40/40) and pad, liga clip, Yankauer suction and suction tubing, 0.25 inch Steri-Strips, surgical glue, Kerlix, and surgical bra

Patient Positioning/Operating Room Setup (See Fig. 5.1)

- Patient is supine with the arm abducted 90 degrees.
- All pressure points are padded, pillow under knees.
- Surgeon stands ipsilateral to dissection site – below arm.
- Surgical assistant stands ipsilateral to dissection site – above arm.

Nodal Points

Wire Localized

Incision (Fig. 6.1)

- Incision should be small and within 3 cm of the mass.
- Optimal cosmesis is the goal when planning your incision.
- Options include curvilinear, circumareolar, or inframammary incisions.

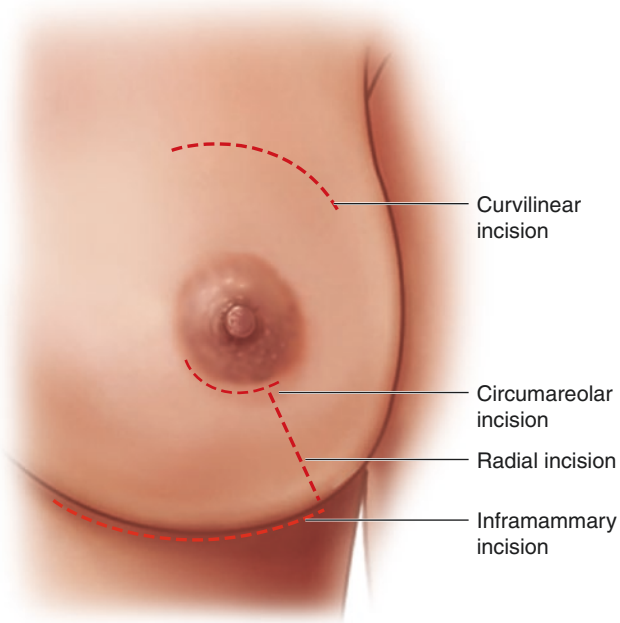

Fig. 6.1 Incision should be performed over area where lump is identified and moves with wire retraction

- Radial incisions may be used in the lower pole of the breast but should be avoided in the upper pole due to skin contracture resulting in distortion of the breast and nipple-areolar complex.
- Infiltrate this skin with local anesthesia (1% and 0.5% Marcaine in a 50/50 mixture).
- Skin incision is made with 15 blade scalpel, sharp dissection to breast tissue.

Dissection

- Electrocautery is then used to dissect through the subcutaneous tissue.

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- Skin flaps are raised using 15 blade scalpel.
- Allis forceps may be used to grasp the glandular tissue surrounding the lesion and provide traction.
- The dissection continues with complete excision of the lesion.
- The specimen is oriented and tagged for pathologic examination. Excision of the radiologic clip is confirmed with intraoperative examination.

Irrigation, Hemostasis, and Closure

- The cavity is then irrigated, and proper hemostasis is obtained with electrocautery and direct pressure.
- Approximate the deep dermal layer with simple inverted interrupted stitches using 3-0 Vicryl.
- The dermis is then closed with a 4-0 Monocryl running subcuticular stitch.
- 0.25 inch Steri-Strips are placed along length of incision.
- Kerlix fluff placed and surgical bra applied to patient.

Seed Localized

- Preoperatively (2 weeks up to day of surgery), a radionuclide seed is placed in radiology.

Incision (Fig. 6.2)

- Once patient is prepped and draped, the Neoprobe is placed over the breast to confirm location of the seed.
- A marking pen is used to mark the site of incision.
- Infiltrate this skin with local anesthesia (1% and 0.5% Marcaine in a 50/50 mixture).
- Skin incision is made with 15 blade scalpel, sharp dissection to breast tissue.

Dissection

- Electrocautery is then used to dissect through the subcutaneous tissue.
- Skin flaps are raised using 15 blade scalpel.
- Allis forceps may be used to grasp the glandular tissue surrounding the seed.
- The dissection continues with complete excision of the lesion.
- Neoprobe may be used during to dissection to guide and orient.
- Explanation of the seed in the specimen is confirmed "hot" with Neoprobe and count of 0 in the breast cavity. The tissue is oriented and tagged for pathologic examination. The excision of the radiologic clip and seed is confirmed to be within the specimen with intraoperative radiologic examination.

Irrigation, Hemostasis, and Closure

- The cavity is then irrigated, and proper hemostasis is obtained with electrocautery cautery and direct pressure.
- Approximate the deep dermal layer with simple inverted interrupted stitches using 3-0 Vicryl.
- The dermis is then closed with a 4-0 Monocryl running subcuticular stitch.
- 0.25 inch Steri-Strips are placed along the length of incision (parallel) or may use surgical glue and then place Steri-Strips in the same fashion.
- Kerlix fluff placed and surgical bra applied to patient.

Pearls and Pitfalls

Common complications include surgical site infection, seroma, and hematoma. Pitfalls of lumpectomy include the possibility of positive margins, requiring re-excision. Pearls include reviewing preoperative imaging.

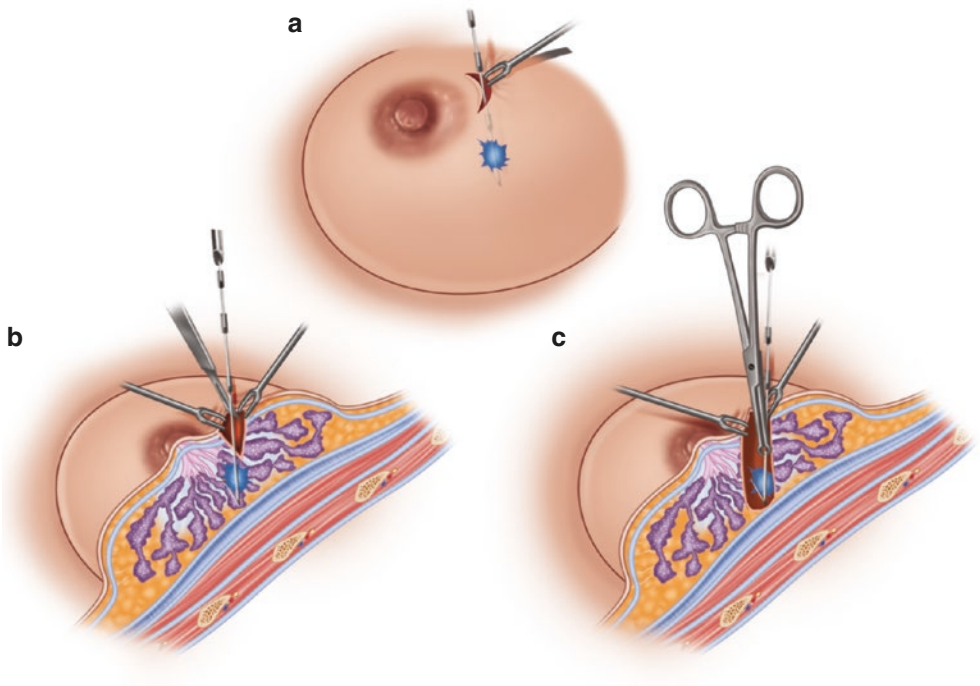

Fig. 6.2 Seed localization lumpectomy: dissection (a) Curvilinear incision arond the Neoprobe (b) Skin flapc and dissection around the Neoprobe (c) Deep dissection with margins around Neoprobe

Access Reader Checklist Appendix

☑ READER CHECKLIST
Lumpectomy (Wire Localized and Seed Localized)

✓ PREFERENCE CARD

►**Instruments**
__Drapes: laparotomy sheet, ¾ sheets x 3
__Sutures: 3-0 vicryl. 4-0 monocryl
►Medication
__1% and 0.5% Marcaine in 50/50 mixture
►**Equipment**
__Mastectomy set
__#15 blade scalpel
__Electrocautery (set 40/40) and pad
__Neoprobe and cover
__Liga clip
__Major lap pack
__Yankauer suction and tubing
__Kerlix fluff

►**Equipment**
__¼ inch steri strips,
__Surgical glue
__Surgical bra

✓ PATIENT POSITIONING/ OPERATING ROOM SETUP

►**Patient Position**
__Patient is supine with arm abducted 90 degrees
__All pressure points padded, pillow under knees
__Surgeon stands ipsilateral to dissection site - below arm
__Surgical assistant stands ipsilateral to dissection site - above arm

✓ NODAL POINTS

WIRE LOCALIZED
►**Incision**
__Incision is small and within 3 cm of mass
__Optimal cosmesis is the goal when planning incision
__Options: curvilinear, circumareolar, inframammary
__Radial incisions may be used in lower pole of breast, but avoid in upper pole due to skin contracture resulting in distortion of breast and nipple areolar complex
__Infiltrate skin with local anesthesia (1% and 0.5% Marcaine in 50/50 mixture)
__Skin incision made with 15 blade scalpel, sharp dissection to breast tissue

►**Dissection**
__Electrocautery used to dissect through subcutaneous tissue
__Skin flaps raised using 15 blade scalpel
__Allis forceps used to grasp the glandular tissue surrounding lesion and provide traction
__Dissection continues with complete excision of the lesion
__Specimen oriented and tagged for pathologic examination.
__Excision of radiologic clip confirmed with intraoperative examination

►**Irrigation, Hemostatis, and Closure**
__Cavity irrigated and proper hemostasis obtained with electrocautery and direct pressure.
__Approximate deep dermal layer with simple inverted interrupted 3-0 vicryl sutures.
__Dermis closed with a 4-0-monocryl running subcuticular suture
__¼ inch steristrips placed along length of incision.
__Kerlix fluff placed and surgical bra applied to patient

SEED LOCALIZED
__Preoperatively (2 weeks up to day of surgery), radionuclide seed placed in Radiology Department

►**Incision**
__After patient prepped and draped, Neorobe placed over breast to confirm location of the seed
__Marking pen used to mark site of incision
__Infiltrate skin with local anesthesia (1% and 0.5% Marcaine in a 50/50 mixture)
__Skin incision made with 15 blade scalpel, sharp dissection to breast tissue

►**Dissection**
__Electrocautery used to dissect through subcutaneous tissue
__Skin flaps raised using 15 blade scalpel
__Allis forceps used to grasp glandular tissue surrounding seed
__Dissection continues with complete excision of lesion
__Neoprobe used during to dissection to guide and orient
__Explanation of seed in specimen confirmed “hot” with Neoprobe and count of 0 in breast cavity.
__Tissue ioriented and tagged for pathologic examination.
__Excision of radiologic clip and seed confirmed to be within specimen by intraoperative radiologic examination

►**Irrigation, Hemostatis, and Closure**
__Cavity rrigated and proper hemostasis obtained with electrocautery cautery and direct pressure.
__Approximate deep dermal layer with simple inverted interrupted 3-0 vicryl sutures
__Dermis closed with a 4-0-monocryl running subcuticular sutures
__¼ inch steristrips placed along length of incision (parallel) or may use surgical glue; place steristrips in same fashion
__Kerlix fluff placed and surgical bra applied to patient