Axillary LN

Level I

Apical

Central

Ant, Post, Lateral

Indication of Radical:

- Large bulky tumour
- Involvement of pectoralis major
- Bulky Axillary LN

C1D:
- Small tumour:
  - Distant mets
  - Reconstructive Sx

Complications
1. Seroma → Keep the catheter
2. Infection → Skin flap necrosis
3. Lymphoedema → Do standard dissection
4. Injury to long thoracic N.
5. Injury to thoracodorsal N.
6. Reconstruct Axillary fat pad

Saliest features:
- Resection of primary breast cancer with margin of normal tissue, adjuvant radiation therapy with or without axillary LN status assessment
- Sx Employed → Wide Local Excision
  - lumpectomy
  - quadrantectomy
- Availability of frozen section
- No undermining of the flaps
- Absolute hemostasis
- No suction drain
- Direct approximation of skin

In patients DCIS
- Stage I & II, Invasive breast ca.
- Solitary lesion
- Patient motivated
- No clue to radiation

C/I
- AbsOLUTE
  - Pregnancy
  - More lesions in different quadrant
  - Diffuse noncaseous microcalcifications
  - H/I irradiation
  - Large tumour
  - Central located tumour

R/ELATIVE
- H/I collagen
- Vascular axis
- Multiple gross tumours in same quadrant
- Multiple gross tumours in different quadrant
BREAST RECONSTRUCTION

146. Ans. a. Transverse rectus abdominis (Ref: Schwartz 9/e p462-463; Sabiston 19/e p871-875; Bailey 26/e p816-817, 25/e p845)

<table>
<thead>
<tr>
<th>Autogenous</th>
<th>Breast Reconstruction</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAM flap (MC)²</td>
<td>Silicone gel implant⁹</td>
<td>Latissimus dorsi flap with</td>
</tr>
<tr>
<td>Latissimus dorsi flap⁴</td>
<td>Silicone implant with saline refill²</td>
<td>implant⁹</td>
</tr>
<tr>
<td>Gluteal flap</td>
<td></td>
<td>TRAM flap with implant⁹</td>
</tr>
<tr>
<td>Ruben’s flap²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoracodorsal flap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral thigh flap</td>
<td></td>
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</tr>
</tbody>
</table>

* Placement of the implant in a submuscular plane beneath the pectoralis major⁹, superior portion of the rectus abdominis, and serratus anterior muscles provides better protection against implant extrusion, as well as decreased risk for capsular contracture and implant displacement⁹.

147. Ans. b. TRAM (Ref: Schwartz 9/e p462-463; Sabiston 19/e p871-875; Bailey 26/e p816-817, 25/e p845)

<table>
<thead>
<tr>
<th>Type</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implant</td>
<td>One stage procedure, minimal prolongation, hospitalization, or recovery, low cost</td>
<td>Poor symmetry⁹ if skin removed or in large ptotic breasts. Capsular contracture, leakage, rupture⁹ possible.</td>
</tr>
<tr>
<td>Tissue expander</td>
<td>Short operative time, hospitalization, recovery not prolonged, low cost</td>
<td>Multiple physician visits post-op. Poor symmetry large or ptotic breasts. Capsular contracture, leakage rupture⁹ possible.</td>
</tr>
<tr>
<td>Latissimus dorsi flap</td>
<td>Short operative time, hospitalization, recovery not prolonged, low cost</td>
<td>Donor site scar² Usually requires an implant² Moderate prolongation hospitalization and recovery.</td>
</tr>
<tr>
<td>TRAM flap</td>
<td>Natural contour. Good match for large or ptotic breasts. Abdominoplasty.</td>
<td>Dopex site scar² Fat necrosis, flap loss possible. Abdominal wall weakness and hernia. Significant prolongation hospitalization plus recovery.</td>
</tr>
</tbody>
</table>

MC method of breast reconstruction: Implants (silicon implants)⁹
Surgical breast reconstruction should never done prior to RT⁹.
Prophylactic Mastectomy

Indications:

1. Biopsy proven Non-invasive Intraductal Carcinoma in situ
   Single focus of lobular Carcinoma in situ
   Pleomorphic Cystic Carcinoma

2. Mammogram suspicious of Moderate to Severe Mammary Dysplasia

3. Persistent nodules which don't vary with menstrual cycle

4. Family history of Hereditary breast cancer

BRCA mutation Carriers - High Risk

- High risk of Ovarian Cancer
- High risk of Contralateral breast
- Adenocarcinoma - Invasive type

- BRCA1 = ER, PR, HER2 negative
Counseling

Irreversible

Not 100% prevention

Employ other preventive strategies too

- Lifestyle
- Tamoxifen

Sx:

Total mastectomy: Include Axillary tail

Subcutaneous
Non Sx Systemic therapy

Leakly Invasive

Radio

Chemo

Hormonal

d'ABC

Radio

Neo adjuvant

Radio

Chemo

Hormonal

mets

Chemo

Hormonal

Adjuvent

Chemo

Hormonal

Antibiotic

Rad

ER/PR

Tamoxifen 20 mg x 5 years

After Chemo

PAC

Fluorouracil
Adriamycin
Cyclophosphamid

For HER2

Add - Trastuzumab
Hormonal Therapy Ca Breast

- SERM
  - Tamoxifen (Doc)
  - 20mg x 5 years BD
- Ovarian Suppression
  - Oophorectomy or LHRH Agonist
  - Used in Post menopause
- Aromatase Inhibitors
- Anti-estrogen
  - Fulvestrant

- Both Pre menopausal & Post menopausal
- Both SERM & ERα/ERβ
- Patient 50 years
- Indicated: Primary prophylaxis
- Approved: Recurrence & Contralateral breast

Tamoxifen: Antagonist of estrogen at breast
Partial antagonist = uterus, bone

S/E
- Hot flushes
- Menstrual irregularity
- Endometrial cancer
- Thromboembolism
- Cataract
Neo adjuvant

- Chemo
  - ER/PR+
  - Downstage disease
  - Anti HER-2 may be given with it

- Hormonal
  - For ER/PR+
    - Only

- Radiotherapy
  - For pt.
  - Not respond chemo or hormonal

Regime
- Cyclophospham
- Doxorubicin
- Fluorouracil