

BREAST EXAMINATION & CASE HISTORY

(Based on *S. Das Clinical Surgery*) + ONE CLINICAL CASE ADDED FOR BETTER UNDERSTANDING

I. BREAST EXAMINATION – STEPWISE APPROACH

(According to *S. Das Clinical Surgery*)

1. History Taking

- ✓ **Personal Details:** Name, Age, Sex, Occupation, Address.
 - ✓ **Chief Complaints:**
 - Lump in the breast (onset, duration, progression).
 - Pain in the breast (cyclical or non-cyclical).
 - Nipple discharge (bloody, serous, purulent).
 - Changes in breast size or shape.
 - Skin changes (ulceration, dimpling, peau d'orange).
 - ✓ **Menstrual & Reproductive History:**
 - Age at menarche and menopause.
 - Number of pregnancies, breastfeeding history.
 - Use of oral contraceptives or hormone replacement therapy (HRT).
 - ✓ **Family History:** Breast or ovarian cancer in close relatives.
 - ✓ **Past Medical & Surgical History:** Any previous breast lumps, surgeries, or radiation.
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2. Inspection (Patient in Sitting Position)

- ✓ Compare both breasts for **symmetry, size, shape, and skin changes**.
- ✓ **Nipple & Areola:** Retraction, inversion, discharge, eczema, or ulceration.
- ✓ **Skin Changes:**
 - Dimpling (suggestive of malignancy).
 - Peau d'orange (orange peel appearance – due to lymphatic obstruction).
 - Ulceration (advanced carcinoma).
- ✓ **Axillary Swelling:** Suggestive of lymph node involvement.
- ✓ **Arm Position Movements:**
 - Hands on hips: to check for fixation of lump to deep tissue.
 - Hands raised above head: to assess skin dimpling and asymmetry.

3. Palpation (Performed in Sitting & Supine Positions)

Breast Lump:

- Site (quadrant-based localization).
- Size, shape, surface, margin.
- Consistency (soft, firm, hard).
- Mobility (fixation to skin, muscle, or chest wall).
- Tenderness.

Nipple & Areola:

- Any masses, discharge, or retraction.

Axillary Lymph Nodes:

- Presence, size, consistency, mobility.

Supraclavicular & Cervical Nodes:

- Enlarged nodes suggest distant spread.
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4. Examination in Supine Position

Better assessment of deep lumps and mobility.

Palpate all quadrants and the axillary tail.

Case Presentation: Breast Adenocarcinoma (Invasive Ductal Carcinoma)

I. GENERAL INFORMATION

- **Patient Name:** Mrs. XYZ
 - **Age:** 50 years
 - **Gender:** Female
 - **Occupation:** Housewife
 - **Address:** [Confidential]
 - **Hospital ID:** [Confidential]
 - **Date of Admission:** [DD/MM/YYYY]
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II. CHIEF COMPLAINTS

- **Lump in the right breast** for the past **3 months**, progressively increasing in size.
 - **Mild pain** over the lump, **non-cyclical** in nature.
 - **Nipple retraction** noticed **1 month ago**.
 - **No history of trauma, fever, or discharge from the nipple.**
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III. HISTORY OF PRESENT ILLNESS

- The patient was apparently well **3 months ago** when she **noticed a small lump** in the right breast.
 - The lump was **painless initially but gradually increased in size** over time.
 - She did not seek medical attention until she noticed **nipple retraction** a month ago.
 - **No history of redness, warmth, or pus discharge** from the lump.
 - **No history of weight loss, loss of appetite, chronic cough, or bone pain** (suggestive of metastasis).
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IV. PAST MEDICAL & SURGICAL HISTORY

- **No previous history** of similar lumps or breast-related issues.
 - **No prior surgeries** related to the breast.
 - **No known history of diabetes, hypertension, or tuberculosis.**
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V. FAMILY HISTORY

- **Mother diagnosed with breast cancer at the age of 55 years** (possibly hereditary).
 - **No history of ovarian cancer, colorectal cancer, or prostate cancer** in the family.
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VI. MENSTRUAL & REPRODUCTIVE HISTORY

- **Menarche:** 13 years
 - **Menopause:** Attained at 48 years (postmenopausal for 2 years).
 - **Parity:** G2P2 (Two full-term normal vaginal deliveries).
 - **Breastfeeding:** Breastfed both children for at least 1 year.
 - **Oral Contraceptive Use:** Not used
 - **Hormone Replacement Therapy (HRT):** Not taken
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VII. GENERAL PHYSICAL EXAMINATION

- **General condition:** Well-preserved, conscious, and cooperative.
 - **Built & Nutrition:** Moderate
 - **Vital signs:**
 - Pulse: **80 beats/min**, regular
 - Blood Pressure: **130/80 mmHg**
 - Respiratory Rate: **18 breaths/min**
 - Temperature: **Afebrile**
 - **Pallor:** Absent
 - **Icterus:** Absent
 - **Cyanosis:** Absent
 - **Clubbing:** Absent
 - **Lymphadenopathy:** Axillary lymph nodes palpable
 - **Pedal edema:** Absent
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VIII. LOCAL BREAST EXAMINATION

A. Inspection (Patient in Sitting Position with Arms at Side, Arms Raised, and Hands on Hips):

- ✓ **Right breast lump visible in the upper outer quadrant.**
 - ✓ **Nipple retraction present.**
 - ✓ **No visible ulceration or discharge.**
 - ✓ **Skin over the lump appears puckered with peau d'orange (orange peel appearance).**
 - ✓ **Both breasts asymmetric (right larger than left).**
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B. Palpation (Performed in Both Sitting & Supine Positions):

- ✓ **Lump Characteristics:**
 - Location: **Right upper outer quadrant**
 - Size: **3 × 4 cm**
 - Shape: **Irregular**
 - Consistency: **Firm**
 - Margins: **Ill-defined**
 - Mobility: **Fixed to underlying structures (pectoralis muscle involvement suspected)**
 - Tenderness: **Absent**

 - ✓ **Axillary Lymph Nodes:**
 - **Palpable in right axilla (3 nodes felt).**
 - **Firm, mobile, and non-tender.**

 - ✓ **Supraclavicular & Cervical Nodes:**
 - **No palpable nodes detected.**
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IX. SYSTEMIC EXAMINATION

- ✓ **Respiratory System:** Normal breath sounds, no wheezing or crepitations.
 - ✓ **Cardiovascular System:** S1, S2 normal, no murmurs.
 - ✓ **Abdomen:** No hepatosplenomegaly, no palpable masses.
 - ✓ **Neurological System:** Normal, no focal deficits.
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X. PROVISIONAL DIAGNOSIS

✦ **Right Breast Malignancy (Suspected Invasive Ductal Carcinoma – Breast Adenocarcinoma)**

XI. DIFFERENTIAL DIAGNOSIS

☐ **Benign Breast Diseases (Less Likely)**

- Fibroadenoma
- Fibrocystic Disease
- Breast Abscess (due to absence of signs of infection)

☐ **Other Malignancies**

- Inflammatory Breast Carcinoma
 - Metastatic Deposits from Other Primary Tumors
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XII. INVESTIGATIONS ORDERED

◆ **Imaging Studies:**

✓ **Mammography:** Spiculated mass with microcalcifications (highly suspicious of malignancy).

✓ **Breast Ultrasound:** Irregular hypoechoic lesion with posterior shadowing.

◆ **Tissue Diagnosis:**

✓ **Fine Needle Aspiration Cytology (FNAC):** Suggestive of **invasive ductal carcinoma**.

✓ **Core Needle Biopsy:** Confirms **moderately differentiated adenocarcinoma**.

◆ **Metastatic Workup:**

✓ **Chest X-ray:** To rule out lung metastasis.

✓ **Liver Ultrasound:** To check for liver involvement.

✓ **Bone Scan:** To check for bone metastases.

◆ **Hormone Receptor Studies:**

✓ **Estrogen Receptor (ER)/Progesterone Receptor (PR) & HER2/neu Testing:** Determines further treatment strategy.

XIII. FINAL DIAGNOSIS

✦ **Right Breast Adenocarcinoma (Invasive Ductal Carcinoma, Moderately Differentiated, Stage IIb - T2N1M0)**

XIV. TREATMENT PLAN

- ◆ **Multimodal Approach Recommended**

1. Surgical Management (Curative Approach)

- ✓ **Modified Radical Mastectomy (MRM)** – if tumor is operable.
- ✓ **Sentinel Lymph Node Biopsy (SLNB) / Axillary Lymph Node Dissection (ALND)** if node involvement suspected.

2. Adjuvant Therapy (Post-Surgery)

- ✓ **Radiotherapy:** If tumor is large or lymph nodes involved.
- ✓ **Chemotherapy:**
 - **For node-positive or aggressive tumors**
 - Common drugs: **Anthracyclines + Taxanes**
 - ✓ **Hormonal Therapy:**
 - **If ER/PR positive:** Tamoxifen (pre-menopausal) or Aromatase Inhibitors (post-menopausal).
 - ✓ **Targeted Therapy:**
 - **For HER2-positive tumors:** Trastuzumab (Herceptin).

3. Palliative Care (For Advanced/Metastatic Cases)

- Pain management, supportive therapy, and psychological counseling.
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XV. PROGNOSIS & FOLLOW-UP

- **Early-stage breast cancer has a good prognosis with 5-year survival rate >85%.**
 - **Regular follow-ups required:**
 - **3-6 months for 2 years**
 - **Annually after 5 years**
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