SNS COLLEGE OF ALLIED HEALTH SCIENCE, COIMBATORE

(Affiliated to the Tamil Nadu Dr. M.G.R Medical University, Chennai)

B.SC., RADIOGRAPHY AND IMAGING TECHNOLOGY

Subject code / subject: 1852 / Modern Imaging Modalities and Recent Trends in Imaging

Year: Third Year

Topic: MAMMOGRAPHY

Case-Based Puzzle

Case Scenario: A 55-year-old female patient presents for a diagnostic mammography after noticing a lump in her right breast. She has no family history of breast cancer but reports mild pain. The initial screening shows an irregular mass with spiculated margins in the upper outer quadrant. Consider factors like positioning techniques, exposure settings, and differentiation between benign and malignant features.

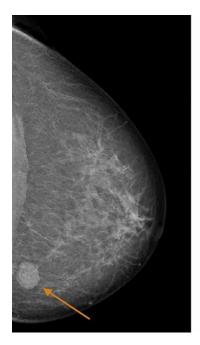
Objectives:

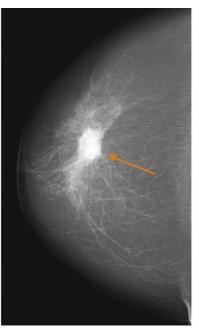
- Apply knowledge of lesion characteristics to classify findings.
- Evaluate the role of digital mammography in diagnosis.
- Identify appropriate patient care protocols, including the presence of a female attendant.

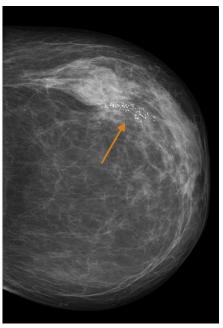
Questions and Clues:

- Based on the described mass (irregular shape, high density, microcalcifications), what characteristics suggest malignancy over benign? Clue: Recall BIRADS categories.
- What positioning projection would best visualize the upper outer quadrant? **Clue:** Standard views include CC and MLO.
- If radiation dose is a concern, how would you adjust exposure factors? **Clue:** Balance kVp and mAs for dense tissue.

Mammogram showing malignant lesion:







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Rubrics	Marks Alloted (out of 10 marks)
Accuracy of Responses	4
Reasoning and Logic	3
Application to Topic	2
Creativity in Approach	1
TOTAL MARKS	10 marks



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