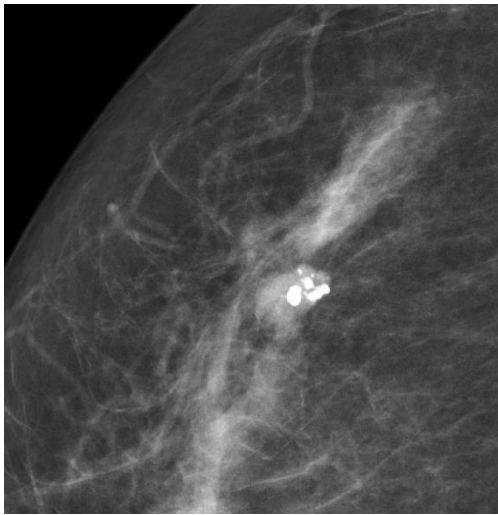


Mammo 2018

1. Which of the following is the correct description of the Resistance pole?

- A) The specific energy of 'Mo' is 20,23 Kev.
- B) The filtration material for 'W' is Ag and Rh.
- C) 'Rh' is mostly used for low density breast.
- D) High energy(20keV) characteristic X-rays is most appropriate for patient who has low density.
- E) Two anode material tube utilized with 'W' and 'Mo' are used as well.

2. Which one is correct description about the following image?



- A) It's a tumor with bad prognosis.
- B) It appears to have calcification aspect which is usually shown in malignant tumor.
- C) This kind of tumor is mostly due to the low sensitivity of Estrogen.
- D) This is the shape of the calcification in the case of regression.
- E) It appears to have a tumor with irregular margins in US image.

3. In followings, which one is the artery that comes from 'pectoralis minormuscle' and provides blood to the rear part of breast?

- A) Axillary artery
- B) internal mammary artery
- C) acromiothoracic artery
- D) intercostal artery
- E) Subclavian artery

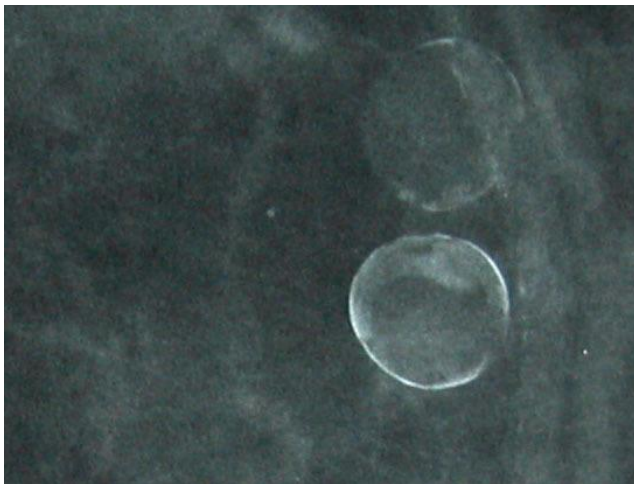
4. Which one is the benign tumor common for woman in range under 30 years old?

- A) Papilloma
- B) Fibroadenoma
- C) Phyllodes tumor
- D) Medullary Carcinoma
- E) Atypical Ductal Hyperplasia

5. What kind of breast disease is frequently accompanied with calcification?

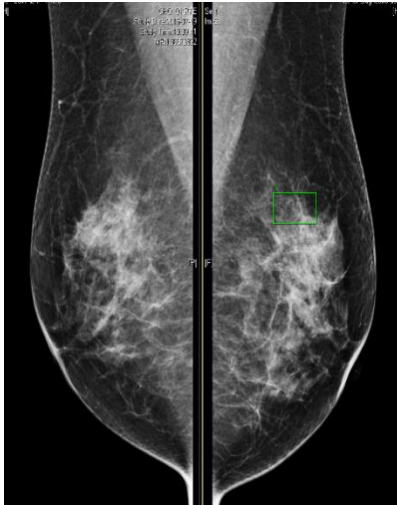
- A) Invasive lobular carcinoma
- B) Medullary carcinoma
- C) Mucinous carcinoma
- D) Ductal carcinoma in situ
- E) Phyllodes Tumor

6. Which of the following is correct description about the disease in the image?



- A) It's the calcification which means malignant tumor.
- B) It is often in the small and dense breast.
- C) This disease is common in young woman.
- D) This disease is commonly appears in mammary gland tissue.
- E) This is the disease that comes from surgical external wound or necrosis.

7. Which one is the correct direction for the patient when doing 'Localization'?

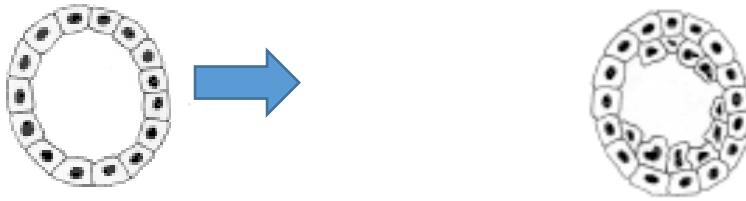


- A) Inferior-superior direction
- B) Internal to External direction
- C) External to Internal direction
- D) Superior-inferior direction
- E) External to Internal Oblique direction

8. Which of the following is the correct diagnostic view for breast cancer in mammography?

- A) Extended diameter of mammary duct without the internal loss and closure.
- B) Contrast enhancement of shapes like 'Prayer beads'.
- C) Condition of extended mammary gland about 5 to 8mm in subareolar area and ampullary region
- D) The case of the broad shape of end tip and short branching in the mammary duct.
- E) The case of irregular mammary duct or drastical narrowing and closure.

9. Which disease is revealed in following image? Following is the changed shape of mammary duct?



- A) Invasive Ductal carcinoma
- B) Atypical Ductal hyperplasia
- C) Invasive lobular carcinoma
- D) Inflammatory Carcinoma
- E) Metastatic carcinoma

10. Which description is not correct about the diagnostic view of nipple's secretion?

- A) Extended duct is revealed in mammography.
- B) Liquid-filled duct is revealed in breast US.
- C) Mammary ectasis is revealed in Galactography.
- D) Contrasted tumefaction is revealed in breast MRI.
- E) There's no intraductal mass in breast US.

11. Which one is the correct description about biopsy using the following equipment?



- A) It is useful for the biopsy of calcification located in the wall of the chest.
- B) It is useful for the biopsy of micro calcification that is not revealed in US.
- C) It can be applied in case of thin breast.
- D) It is useful for the patient who cannot hold their position.
- E) Using antithrombotic doesn't disturb the operation

12. Which description is not true about the feature of benign 침상 breast tumefaction?

- A) Representative disease is Sclerosing duct Hyperplasia.
- B) Density of the speculate is very dense.
- C) Liposclerosis is accompanied with calcification.
- D) There is a long and thin material in the central portion, and it appears to be thick bundle shape.
- E) Radiolucent is frequently appears to be parallel to the speculate

13. Which one is not the expression about the shape in BI-RADS?

- A) microlobulate
- B) round
- C) oval
- D) lobular
- E) irregular

14. Which of the following is not the infiltrative tumor?

- A) Ductal Carcinoma In Situ
- B) medullary cancer
- C) mucinous carcinoma
- D) Tubular carcinoma
- E) scirrhoma

15. Which one is the correct description of the breast parenchyma?

- A) Hormone has influence on it, and has periodic change.
- B) It composed with 10 ~ 15 lobules.
- C) It upholds the grandular tissues.
- D) It includes vessels, lymphnodes, nerves.
- E) It spreads out widely through the surface to periphery.

16. Which one is not a correct pattern of the growth in Ductal Carcinoma In Situ?

- A) Comedo Ductal Carcinoma in situ (DCIS)
- B) Crilbriform Ductal Carcinoma in situ(DCIS)
- C) Micropapillary Ductal Carcinoma in situ (DCIS)
- D) Solid Ductal Carcinoma in situ (DCIS)
- E) Atypical Ductal Carcinoma in situ (DCIS)

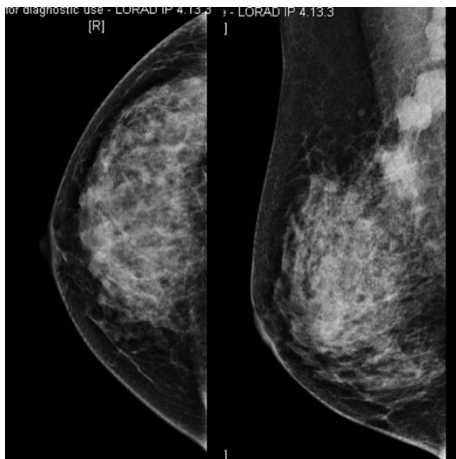
17. In the Breast TNM fractionation, which stage would have 4cm tumor, and 3 metastatic lymphnodes, and no metastasis to other organ?

- A) T2N4M0
- B) T2N1M0
- C) T3N2M0
- D) T3N3M0
- E) T4N3M1

18. Which of the following is the correct criterion in order to pass the test using standard phantom?

- A) More than 4 fibrin, 4 group of calcification, 2 tumefaction
- B) More than 4 fibrin, 3 group of calcification, 2 tumefaction
- C) More than 4 fibrin, 3 group of calcification, 3 tumefaction
- D) More than 3 fibrin, 3 group of calcification, 2 tumefaction
- E) More than 3 fibrin, 2 group of calcification, 2 tumefaction

19. Which technique is appropriate for the following image?



- A) Spot compression
- B) Exaggerated craniocaudal projection(XCCL)
- C) Axillary tail view
- D) Superolateral-to-inferomedial oblique(SIO)
- E) Cleavage method(CV)

20. Which of the following is the correct description about the mammography?

- A) In the case of a woman under 25 years old, the MLO is solely applied.
- B) Most of the exam for re – checking (Follow up) is carried out in terms of 1 ~ 3 months.
- C) In case of a pregnancy or lactogenesis with obvious clinical issue, mammography is firstly applied.
- D) Taking mammography is encouraged 7 days after period.
- E) Due to the improvement of US equipment, Sonography is applied more than mammography.

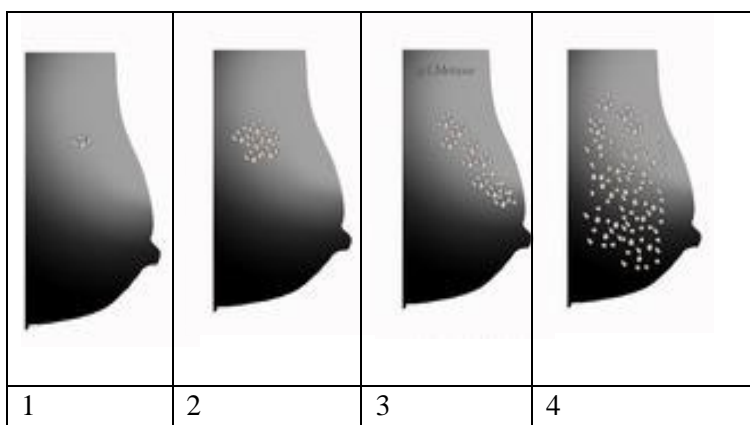
21. Which of the following is the most relevant disease for woman who struggles with secretion in one side of breast?

- A) fibroadenoma
- B) Ductal Carcinoma in situ (DCIS)
- C) Intraductal papilloma
- D) Hamartoma
- E) cystic change

22. Where is the primary portion that frequently arises breast cancer for man?

- A) Upper outer quadrant
- B) Upper inner quadrant
- C) Lower outer quadrant
- D) Lower inner quadrant
- E) Nearby Subareola

23. In the case of distribution of calcification in breast, which of the following is the correct order that has high possibility of benign – malignant?



- A) 4 – 2 – 1 – 3
- B) 4 – 3 – 2 – 1
- C) 1 – 2 – 3 – 4
- D) 1 – 3 – 2 – 4
- E) 2 – 3 – 1 – 4

24. Which of the following description is correct about absorption discrepancy of X-ray in breast tissue?

- A) Small breast has much larger attenuation than big breast.
- B) X-ray absorption decreases if the density of breast is high.
- C) Penetration rate of thin breast tissue is higher than thick one.
- D) Object contrast would be decreased by using high atomic number so that it can increase the photoelectric effect
- E) Absorption rate would increase more in menopause patient than young patient.

25. Which of the following is the correct description about a mammotom biopsy?

- A) It usually applied for the lesion that belongs to ACR-BI-RADS category 3.
- B) Using 14 gauge needle, take the tissue by shooting more than 4~5 times.
- C) By using equipment with principle of vacuumsuction, malignant lesion can be removed.
- D) It is a triangulation that calculates the location of lesion in 3-dimensions.
- E) It can remove the lesion regardless of its size.

26. In CC view, if the lesion is located in medial part of papilla, how does it look like? (Compare to the aspect of MLO view)

- A) It is located much lower
- B) It is located much higher.
- C) It seems much bigger.
- D) It seems much smaller.
- E) It seems to be closer to the epidermis.

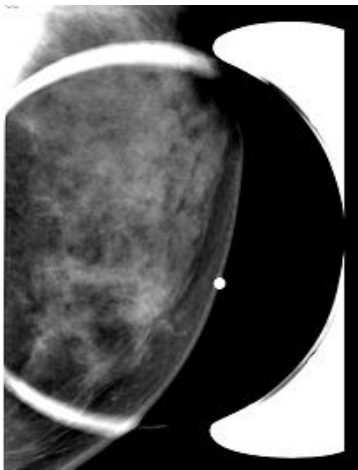
27. Which of the following is correct description regarding breast MRI?

- A) Benign lesion can be enhanced by contrast and it can be misconceived to tumor.
- B) It is very effective for 50% of patient who has DCIS disease.
- C) Micro calcification can be missed.
- D) It can appraise the reactivity of cancer in chemotherapy.
- E) All above are correct.

28. Where is the most frequent portion for the most of breast disease?

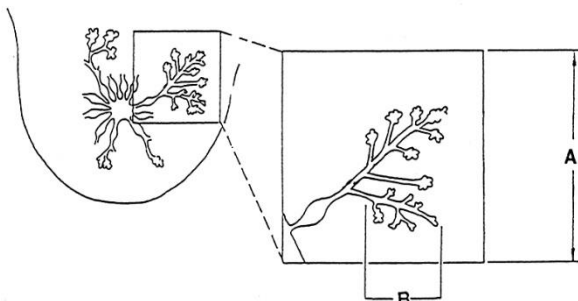
- A) lobule
- B) areola
- C) ductule
- D) lymph system
- E) terminal duct lobular unit

29. Which of the following is not correct about the image?



- A) It can magnify an object 2 times.
- B) Taken with Small focus
- C) 5:1 Grid must be used.
- D) Able to know the shape and number of calcareous lesion.
- E) Air-gap technique is applied.

30. In the following image, what is the anatomical terms of A and B?



- A) A=Lobe, B=Lobule
- B) A=Areola, B=Lobe
- C) A=Main duct, B=Ductules
- D) A=Duct orifice, B=Ductules
- E) A=Lobule, B= Ductules

31. In mammography image, which one doesn't have to be marked in it?

- A) Patient number
- B) Inspector name
- C) Radiation irradiation condition
- D) Left / Right mark and exam technique
- E) Name and gender

32. Which one is related with 'Paget disease'?

- A) Cystocarcinoma
- B) Ductal carcinoma in situ
- C) Intraductal Papillary Neoplasm
- D) Spreaded breast cancer
- E) Ductal Lobular Carcinomas

33. Among breast cancers, this kind of cancer has a good prognosis and low metastatic rate, and slow growth rate. What is it?

- A) Invasive Lobular Carcinoma
- B) invasive Ductal Carcinomas
- C) Colorectal Mucinous carcinoma
- D) scirrhus carcinoma
- E) medullary carcinoma

34. Where is the location of mammary gland before it's degraded from fetus?

- A) axillary fossa - inguinal region
- B) axillary fossa – umbilicus region
- C) clavicle - pubic region
- D) sternum - umbilicus region
- E) clavicle - inguinal region

35. In normal US image, which of the following is correct in the order from surface to the inner part?

- A) Skin, fibroglandular tissue, subcutaneous fat, muscle, rib, lung
- B) Skin, subcutaneous fat, fibroglandular tissue, muscle, rib, lung
- C) Skin, subcutaneous fat, rib, fibroglandular tissue, muscle, lung
- D) Skin, rib, subcutaneous fat, fibroglandular tissue, muscle, lung
- E) Skin, rib, fibroglandular tissue, muscle, lung

36. Which of following is related with glass cover of X-ray tube and cooling oil?

- A) Inherent filtration
- B) Additional filtration
- C) Compensation filtration
- D) External filtration
- E) Internal filtration

37. Which of following description is not correct about Mediolateral oblique(MLO) projection?

- A) Inferior wrinkle of breast should be completely open.
- B) According to patient, the angle of tube can be changed
- C) All fibroglandular tissue should be included.
- D) In case of giant breast, should try to prevent the 'sagging'.
- E) In case of a patient who underwent the BCS, pectoralis major should be excluded.

38. In Craniocaudal(CC) View, which one is the subtract point among the image evaluation?

- A) Pectoralis major is included.
- B) Medial tissue of breast is included
- C) In the center of the breast, the outline of the nipple is observed laterally.
- D) Retromammary fat has been included a lot.
- E) Compare to the MLO image, the difference in length between the rear of the papilla is at least 1cm.

39. In MLO projection, which angle is most appropriate if the patient has short waist and fat – wide breast?

- A) 45°
- B) 55°
- C) 60°
- D) 65°
- E) 70°

40. Which of the following description is not correct about the standard abbreviation?

- A) Caudocranial projection is abbreviated as 'FB'
- B) Spot compression projection is abbreviated as 'SC'
- C) Lateromedial oblique projection is abbreviated as 'LMO'.
- D) Exaggerated Craniocaudal projection is abbreviated as 'XCCL'.
- E) Axillary tail projection is abbreviated as 'AT'.

41. In the Phantom image assessment, what is the score of the mass?



- A) 3.0
- B) 3.5
- C) 4.0
- D) 4.5
- E) 2.5

42. Which of the following description is correct about 'Quality control'?

- A) The inspection cycle of the clinical video evaluation is 6 months.
- B) The re-exam rate should be kept lower than 3%.
- C) The average dose of the mammary gland should not exceed 3mGy.
- D) Radiation field inspection should not exceed 5% of 'SID' by difference between X-ray irradiation field and photorealistic field.
- E) In the accuracy measurement of the tube voltage, the preset kVp value and average measured value should be within 5%.

43. Which of the following is not relevant to 'Exposure dose'?

- A) kVp
- B) SID
- C) Grid ratio
- D) Focal spot size
- E) The thickness of breast

44. Which of the following description is correct about 'Geometric unsharpness'?

- A) Using small focal size increases the probability of unsharpness.
- B) If the distance between the subject and the image receptor is shortened, the unsharpness probably increases.
- C) The unsharpness appears to be smaller on the negative side than on the positive side of the X-ray tube.
- D) Even if the size of effective focus is same, the rotation anode X-ray tube appears to be larger than the fixed anode X-ray tube.
- E) The longer the distance between focus and film, the greater the penumbra area.

45. Which of the following description is correct about the Mammography dose index?

- A) Mammal thickness, components, and X-quality are considered.
- B) The maximum dose of mammary gland tissue is a useful measuring criterion rather than the average dose.
- C) If a grid is not used, it should not exceed 0.2rad.
- D) Most of the radiation dose used during the examination is absorbed from the skin, and the skin entrance dose is used as an indicator.
- E) The incident dose is the amount of radiation dose measured directly above the compression paddles.

46. When using 'AEC', which of the following is not selected automatically?

- A) Target
- B) Filter
- C) Tube Voltage
- D) Tube Current
- E) Exposure time

47. Which of the following is correct about Compression?

- A) The inspection cycle of the breast compression device is 1 year.
- B) Pressure intensity is within 24 ~ 45 pounds.
- C) The thickness of the compressors should be 4mm or higher, and it should also be safe and solid.
- D) Increased distance between subject and image receptor surface improves resolution.
- E) Pressure increases geometric unsharpness by minimizing the subject-film distance.

48. Which one is wrong combination of the targets and filters?

- A) W/Rh
- B) Mo/Mo
- C) Rh/Rh
- D) Rh/Mo
- E) W/Ag

49. In Digital mammography, what kind of equipment digitizes X-rays using a 'photic simulation phosphorescence plate' as a detector?

- A) CR
- B) CCD detector
- C) TFT method of a-Si
- D) TFT method of a-Se
- E) CAD

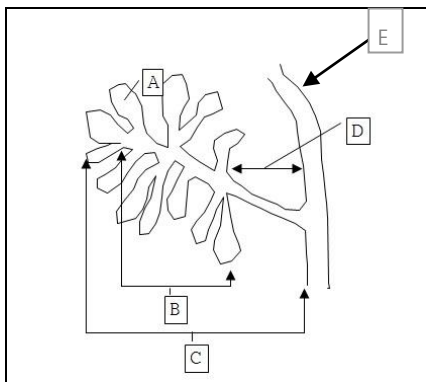
50. Which of the following is not correct about 'MTF'?

- A) It is a qualitative factor of the quality of digital images.
- B) The degradation of image quality due to the diffusion of light results in a decrease in MTF.
- C) Because the images with high MTF have obvious noise on it, it's difficult to recognize the objects.
- D) The presence of an MTF that exceeds the effective measurement range indicates a high sharpness.
- E) The criteria for assessing MTF is not less than 2~4lp/mm.

51. Which of the following is correct about the Point processing?

- A) This image processing method produces new pixel values by using the surrounding pixel values.
- B) This method is used to obtain images from a change in wavelength of X-ray that penetrates human tissue.
- C) This processing method is mainly used when changing the position or size of the images.
- D) To change the size value of the pixel itself, 'Look Up Table' is typically used.
- E) This method is used for the effects of image enhancement, image smoothing, and edge detection.

52. Which one is not correct about the following image?



- A) A- intralobular terminal duct
- B) B – extralobular terminal duct
- C) C - terminal duct lobular unit.
- D) D – ductile
- E) E – Lactiferous sinus

53. Which of the following description is correct about epithelial tissue?

- A) Most breast diseases occur in the epithelial layer
- B) It consists of a circumferential shaped basilar membranes and a complete myoepithelial cell layer.
- C) Among the breast tissue, myoepithelium layer and basilar membrane are least affected by hormones.
- D) It is located inside the basilar membrane and is a kind of 'station' layer to regenerate circular shaped cells.
- E) The epithelial tissue consists of three layers.

54. What is the largest vein in breast?

- A) Azygos Vein
- B) Axillary Vein
- C) Intercostal Vein
- D) Internal Mammary Vein
- E) subscapular vein

55. Which of following is correct about the hormones that involved in breast function?

- A) Prolactin - It grows the lactiferous ducts longer and increases the linear structure.
- B) Oxytocin - It supplies amino acids, fatty acids, glucose and calcium to the breast milk.
- C) Progesterone – it increases the lactiferous ducts and lobular epithelium, and expedites the growth of the 'Acinus' in pregnancy.

Estrogen - It is released from the frontal lobe of the pituitary gland during pregnancy, greatly developing the breast and promoting the secretion of the juice.

Insulin - It is excreted from the adrenal glands and promotes the secretion of the juice.

56. Which of the following is part of a malignant breast disease?

- A) Sclerosing adenosis
- B) Intraductal papilloma
- C) Ductal carcinoma in situ
- D) Atypical ductal hyperplasia
- E) Mastitis

57. Which of the following is not correct about the Ductal Carcinoma In Situ(DCIS)?

- A) It is relatively easy to treat and has good prognosis.
- B) Most of the DCIS usually comes with micro-calcification.
- C) It's well – touched and moveable lump, and mostly occurs in 20s and 30s.
- D) It is limited in the lactiferous drifts, and in most cases, occurs in the end-tube of mammary gland unit.
- E) There's no transmission because it doesn't impinge to the surrounding epilepsy.

58. Which of the following is correct about Breast cancer?

- A) Viscous cancer is growing rapidly.
- B) Infiltrative breast lobular cancer accounts for about 5% of all kinds of infiltrative breast cancer.
- C) Breast intraepithelial carcinoma has less calcification and is rarely touched.
- D) If it doesn't pass though the basilar membrane of lactiferous ducts, it's called as 'Ductal carcinoma in situ(DCIS)' or 'Infiltrative breast duct cancer'.
- E) Papillocarcinoma is a common cancer and is accompanied by micro-calcification.

59. What factors are associated with the metastasis of malignant breast diseases?

- A) Feeding
- B) Lymphatic duct
- C) Flow of blood
- D) Variation of fat tissue
- E) Changes in the size of breast

60. Which one is correct about the hyperplasia of epithelial cell?

- A) This refers to an over-extension of the skin's mammary gland.
- B) This means that calcified – hematoma caused by trauma.
- C) As a part of a proliferative breast disease, it is an over growth of the mammary duct or lobular cell.
- D) As a part of a proliferative breast disease, it is an over growth of the Pectoralis major or lobular cell.
- E) There is no probability to occur the infiltrative breast cancer.

61. Which one is not a direct sign of breast cancer?

- A) Skin hypertrophy
- B) Pulled nipple
- C) Expanded mammary duct
- D) Structural deformity
- E) Palpable mass

62. Which of the following factor doesn't have to be marked on the Mammography image?

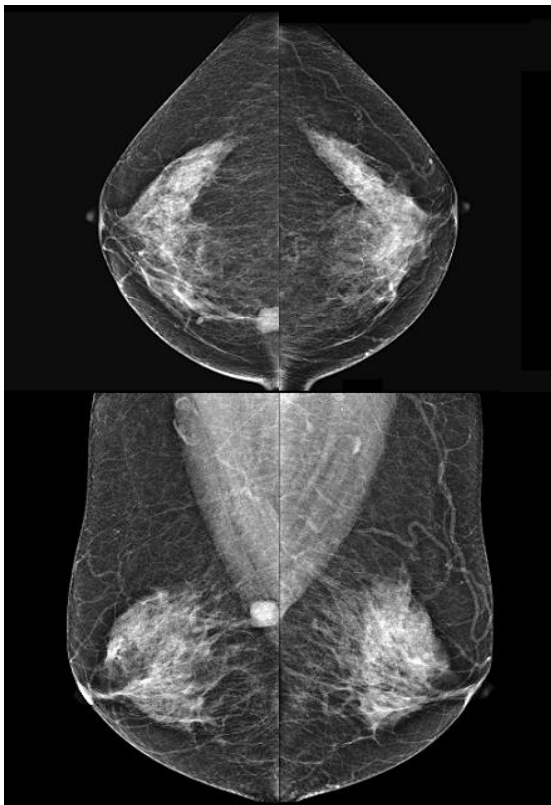
- A) Patient number
- B) Inspector information
- C) Radiation irradiation condition
- D) Left and Right marks and name of the projection
- E) Name and gender

63. How do you perform additional examinations to see lesions on the outside of the breast that are not easily visible in Supero-inferior projection?

- A) Valley view
- B) Partial compression projection
- C) Outer highlighting Supero-inferior projection
- D) Outer superior – mediolateral oblique projection
- E) Infero-superior projection

64. Which description is correct about following images?

- A) Structural distortion is observed.
- B) These are local asymmetric images.
- C) A lesion is observed in areas where breast cancer easily occurs.
- D) Additional mammography (Valley view) can be performed in order to assess lesions.
- E) For additional US imaging, direction of 9 to 12 o'clock should be examined.



65. In Supero-inferior projection, which part of the structure is difficult to express?

- A) Upper
- B) Lower
- C) Medial
- D) Lateral
- E) Subareola

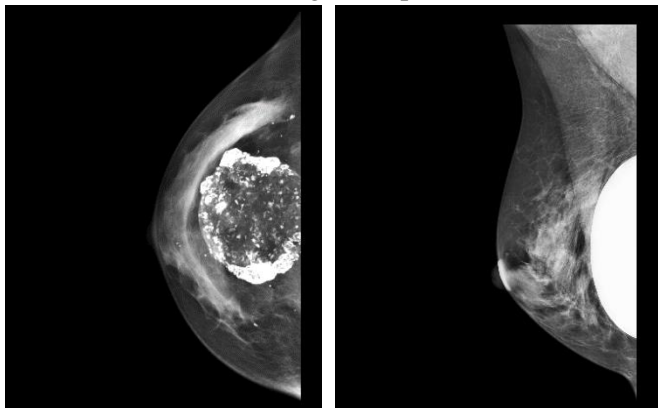
66. What is true about the 'TNM System'?

- A) T4: DCIS, LCIS
- B) NX : No transition to local lymph nodes.
- C) T2 : T2: The maximum length of a mass is 2 cm or longer and not more than 5 cm.
- D) Mo : Remote metastasis including lymph nodes on the upper part of ipsilateral clavicle.
- E) N2 : 4 to 9 axillary lymph nodes with transferred cancer cells.

67. Which of the following description is correct about 'fibroadenoma'?

- A) It occurs in the unit of end-tube of breast lobules.
- B) It occurs in large mammary duct, including lactiferous sinuses.
- C) Hemoid or mucous-liquid lactate secretion is observed.
- D) It is a cancer that is restricted to the inside of mammary duct and does not infiltrate into the surrounding tissue.
- E)The size changes during the Menstrual cycle, and there is no change in the period of pregnancy or breastfeeding.

68. Which of the following description is true about the point of sameness in those two images below?



- A) It needs Biopsy
- B) There's a malignant mass in breast
- C) There's a massive calcification
- D) This patient has gotten breast augmentation
- E) AEC is applied when doing mammography.

69. Which of the following is correct about the cycle of follow – up exam in case of ongoing breast cancer?

- A) For the first 5 years, medical examination should be implemented every 3 ~ 6months.
- B) For 5 years, other preoperative tests are conducted every year.
- C) Ultrasound exam is conducted immediately after surgery every six months for 10 years
- D) Mammography is performed every three to six months for the first five years after surgery.
- E) Breast MRI is performed every year after surgery.

70. Which of the following description is correct about the marked portion in the image?



- A) It is caused by less retrogression.
- B) It occurs from malignant or inflammatory diseases.
- C) It is caused by excessive growth of the breast tissue.
- D) It is a rare phenomenon caused by a lack of protein.
- E) It is related with the obesity level of the patient.

71. What kind of therapy can selectively control(suppress) the specific gene?

- A) Targeted Therapy
- B) Radiation Therapy
- C) Antihormone Therapy
- D) Chemotherapy
- E) Thermal therapy

72. Which of the following description is correct about the breast partial mastectomy?

- A) It's performed if the subpapillary lesion is large.
- B) It is a method that removes the entire breast tissue, including papilla and skin.
- C) It is performed if the tumor size is less than 4~5cm and is a single tumor.

- D) After breast preservation, radiation therapy may be combined if necessary.
- E) Remove only the areas with cancer lesion, and dissection for the axillary lymph node is not necessary.

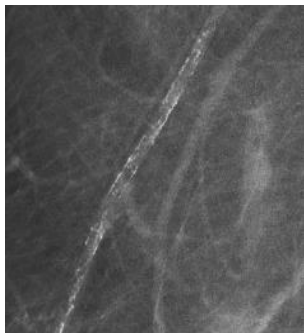
73. What is true about BI-RADS?

- A) Composition of terms and reporting system
- B) Differentiating the reading breast images and patient care.
- C) Smooth communication with reading physician in the medical institution
- D) First edition (1992) included mammography, breast US, and breast MRI.
- E) Clear communication between radiologists and medical staff.

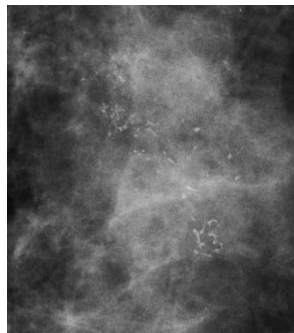
74. In the Mammal tumor assessment criteria, which of the following is considered malignant?

- A) Irregular
- B) Homogeneous
- C) Well-circumscribed
- D) Wide scatter calcification
- E) Microlobulated

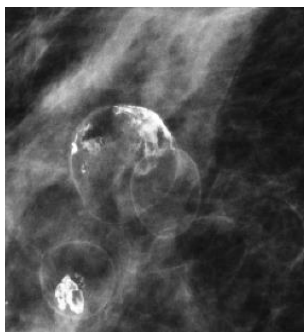
75. Which of the following image is malicious?



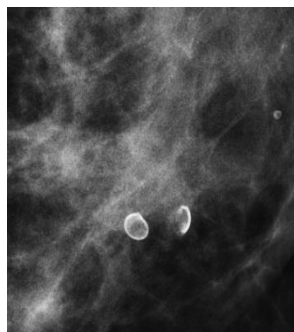
A)



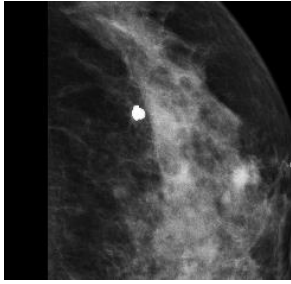
B)



C)

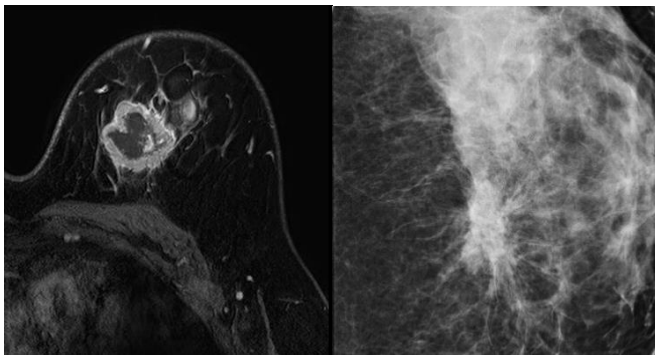


D)



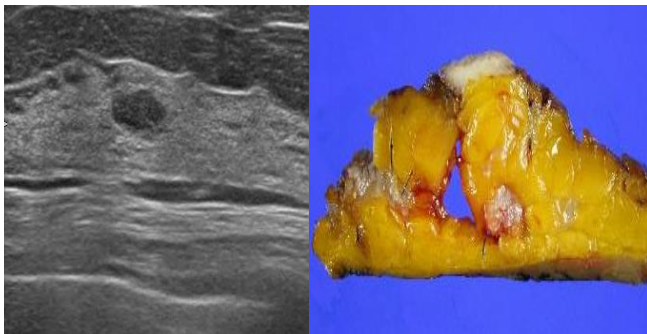
E)

76. Which of the following image has different diagnostic view?



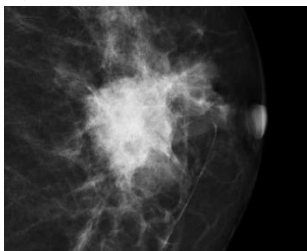
A)

B)



C)

D)

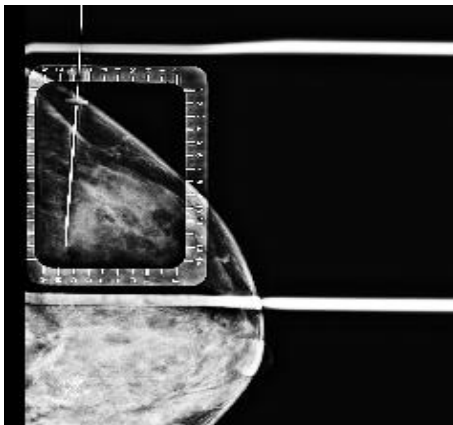


E)

77. What is the earliest signs of breast cancer in mammography?.

- A) Expansion of mammary duct
- B) Skin hypertrophy
- C) Nipple retraction
- D) Micro calcification
- E) Asymmetric size

78. Which of the following is correct about the image below?



- A) It's a surgical procedure for proceeding biopsy of palpable mass
- B) Size can be accurately measured by enlarging the lesion.
- C) Adjust the tourniquet so that it can be released automatically.
- D) The position and depth of the needle can be checked by obtaining images in both directions.
- E) This procedure allows users to remove tissues as much as possible.

79. Which of the following description is correct about fine needle aspiration?

- A) 11 G or 14 G are routinely used.
- B) There's less possibility to transfer along the route of the fine needle.
- C) It is easy to inspect and has high pathological precision since it can obtain a lot of samples.
- D) It's enforceable for all kinds of lesions and it can distinguish the location of invasive cancer.
- E) Cancer cells do not come out easily than benign ones.

80. In ductogram, which of the following is correct order in which contrast medium is filled?

- A) lactiferous sinuses - divided branches – areal branches -terminal lobule unit – terminal branches
- B) lactiferous sinuses - terminal lobule unit - divided branches – areal branches – terminal branches
- C) lactiferous sinuses – areal branches - divided branches – terminal branches – terminal lobule unit
- D) lactiferous sinuses – divided branches – areal branches – terminal branches – terminal lobule unit
- E) lactiferous sinuses – divided branches – terminal branches – areal branches – terminal lobule unit

81. Which of the following statements is wrong about Tomosynthesis?

- A) Exposure dose can be reduced by decreased a retake
- B) It can find dim lesion and see clearly for boundary of mass
- C) It is a way to get 3D breast images from several planes in various angles
- D) Overlapping can be increased than general mammography
- E) overlapped tissue can be observed separately

82. Which of the following statements is wrong about CAD?

- A) Recall rate can be decreased
- B) Double reading is possible
- C) It can be cut down on expenses, time and manpower
- D) It seemed a second opinion
- E) These software can apply for digital mammography

83. What organ has lowest risk?

- A) Bone
- B) Liver
- C) Brain
- D) Ovary
- E) Lung

84. Which of the following statements is true about structural distortion?

- A) It is an opinion for positive mass
- B) Normal structure evanesces as being seen mass
- C) It can be seen by being overlapped the breast tissue and founded in both
- D) It is indicated local collapse or changing of mammary gland parenchyma edge
- E) It is appeared shape of circular or eggshape

85. Which of the following statements applies intermediate concern of calcification?

- A) amorphous
- B) Calcification of bars
- C) Coarse and thick
- D) fine pleomorphic
- E) Macrocalcifications

86. What part does generate X-ray by electron collision to target?

- A) Focal spot
- B) Real focus
- C) Effective focal spot
- D) Nominal focal spot
- E) Small focal spot

87. What is true about tube voltage?

- A) The allowable error is in less than 5% in the domestic standard
- B) It is an important exposure factor for an image resolution
- C) The available range is usually 22~35kVp in mammography
- D) It should be increased the exposure time than kVp in a thick and high density breast tissue
- E) The available range is 25~28kVp for a rhodium target

88. What is not relative with patient exposure dose?

- A) kVp
- B) SID
- C) Ratio of grid
- D) focal spot size
- E) Thickness of breast

89. Which of the following statements is not a indicant for a Magnification projection?

- A) To analyse the marginal of the masses
- B) To measure the shape and number of microcalcification
- C) If microcalcification is located close to skin
- D) To distinguish that blood vessel, steatonecrosis fat necrosis or secretion of calcification in microcalcification
- E) To see the part less visible in a basic methode

90. Which of the following statements is wrong about purpose of Roll View?

- A) The high density tissue can be seen widely
- B) It is for checking the unclear and abnormal tissue
- D) It applies for an accurate diagnosis if it can be confirmed a lesion by only one method
- D) It applies if a lesion can be touched but can't be seen in left and right breast image
- E) It applies if lesion tissues must be seen for divided them accurately