Article: Using Automated Breast Sonography as Part of a Multimodality Approach to Dense Breast Screening
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Objectives: After studying the article titled “Using Automated Breast Sonography as Part of a Multimodality Approach to Dense Breast Screening,” you will be able to:

1. Identify the characteristics associated with a malignant breast cancer.
2. Explain how automated breast sonography creates diagnostic images.
3. Discuss the potential advantages and limitations of automated breast sonography.

1. Breast cancer in women ranks second in incidence in the United States to
   a. Colon cancer
   b. Lung cancer
   c. Thyroid cancer
   d. Melanoma

2. Recent data show an annual incidence of new cases of breast cancer of approximately
   a. 100,000 per year
   b. 150,000 per year
   c. 200,000 per year
   d. 250,000 per year

3. Automated breast sonography and handheld sonography both have detection rates for cancer of approximately
   a. 80%
   b. 90%
   c. 95%
   d. 100%

4. The volume data acquired using automated breast sonography result in approximately how many reformatted digital images?
   a. 250
   b. 300
5. Sonographic features of malignant breast cancer include all of the following except
   a. Irregular shape and margins
   b. Acoustic shadowing
   c. Hypoechoic “halo” sign
   d. Parallel orientation (mass wider than tall)

6. False-positive results of automated breast sonography were most commonly the result of
   a. Focal fibrosis
   b. Tissue calcification
   c. Cystic structures
   d. Fatty tissue

7. The prevalence of increased breast density in women who have mammograms is estimated to be approximately
   a. 10%–20%
   b. 20%–30%
   c. 30%–50%
   d. 40%–60%

8. Potential advantages of automated breast sonography include all of the following except
   a. Short examination times
   b. Reduced cost compared with handheld sonography
   c. Ease of use
   d. Improved reproducibility

9. Compared with MRI, automated breast sonography offers all the following features except
   a. Multiplanar imaging
   b. Simplicity of imaging protocol
   c. Improved detection of malignant versus benign lesions
   d. Good patient acceptance

10. At the present time, the principal limitation of automated breast sonography is
    a. Large breast size
    b. Reformatted image quality
    c. Lesion heterogeneity
    d. Lesion hypoechogenicity