

INTRODUCTION

Breast cancer is the most frequently diagnosed cancer in females and the second most frequent cause of cancer deaths.

(Parker et al., 1996)

Different targets appear to be relevant in the diagnosis of breast diseases:

To achieve the highest sensitivity in discovering cancers especially in asymptomatic women, to characterize an increasing number of uncertain findings, avoiding the surgical treatment of benign lesions, a problem of specificity & to obtain a reliable presurgical evaluation of cancers, in particularly excluding multifocality and contralateral cancers.

(Sardannelli et al., 1998)

At the present time, mammography is the only imaging modality with proved efficacy for the detection of early, clinically occult breast cancer and remains the primary imaging modality for breast cancer screening.

Limitations in both the specificity and sensitivity of mammography have stimulated exploration into adjunctive imaging modalities however, including breast MR imaging.

(Orel SG 2000)

Breast lesions may be identified on MRI that are not shown on mammography or ultrasound owing to the high sensitivity and relatively poor specificity of contrast enhanced MRI.

(Warren R, Kassar P. 2001)

MRI of the breast can identify occult breast cancer in many patients and may facilitate breast conservation in select women.

(Olson Ja Jr, et al., 2000)

An adequate diagnosis at MRI of the breast should take into account the results of the patient's history, physical examination and all imaging tests performed before MRI.

(Kinkel K, Hylton NM. 2001)

Breast MRI is becoming an important tool for the improved management of breast cancer.

The indications for breast MRI include compromised mammography, staging of disease within the breast and adjacent structures, difficult histology, and other special diagnostic situations. Patients with compromised mammography include previous surgery, radiographically dense breasts, and silicone augmentation .

(Harms SE 1998)

Aim of the work:

The aim of this work is to study MR sequences in breast imaging as a diagnostic modality for benign and malignant breast tumors.

Material and methods:

20 cases with breast mass are submitted for MR examination, preceded by X-ray mammography and sonography for all cases.