

BEHAVIOR IMAGING STRATEGY OF MAMMARY GLAND WITH IMPLANT

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Introduction: Breast implant have become increasingly popular, being one of the most common surgeries required by women. Nowadays, imaging explorations are becoming indispensable for establishing complex clinical-imaging diagnosis of the pathology of the mammary glands with implant. The main problem regarding the imaging management of mammary glands with implant consists in establishing the imaging exploration protocol, which would correspond to a rigorous and systematized methodology, according to the latest requirements-more effective, less traumatic and as fat as possible.

Purpose: Thesis purpose is to estimate the sensitive and specific value of MRI and USG imaging investigation of breast implant patients in order to establish the imaging behavior of the implant mammary gland. The obtained results will be used to develop a customized imaging algorithm for the patients.

Material and methods: The prospective study includes 36 patients with breast implants who underwent ultrasound examination (USG) of the mammary glands and magnetic resonance imaging (MRI) with contrast administration. Data were reported according to the international classification BI-RADS (Breast Imaging Reporting and Data System). The recorded results were compared and performed using two different ways.

Fig1. US image of the implant lesion of the breast

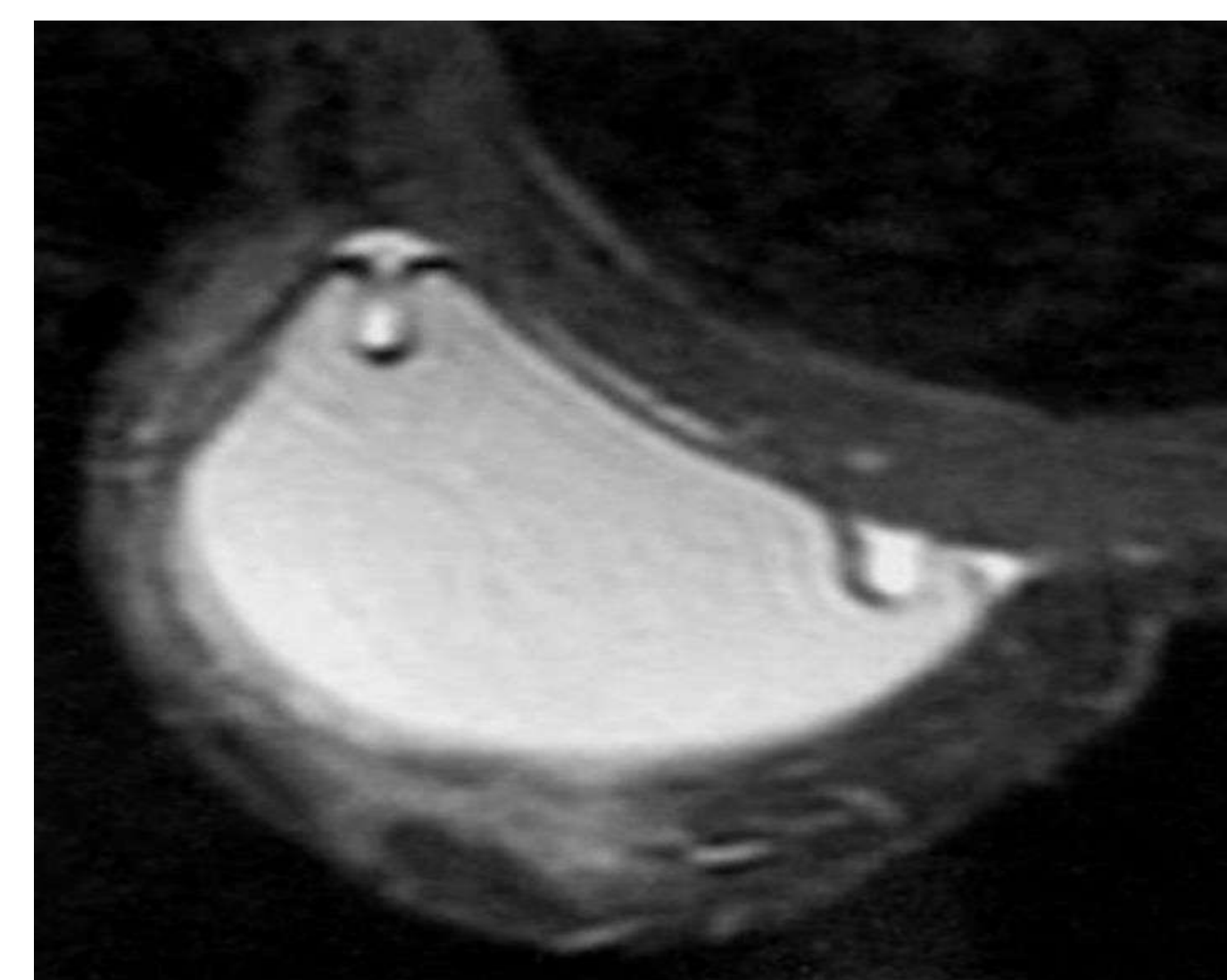


Fig2. Intracapsular rupture, MRI (T2)

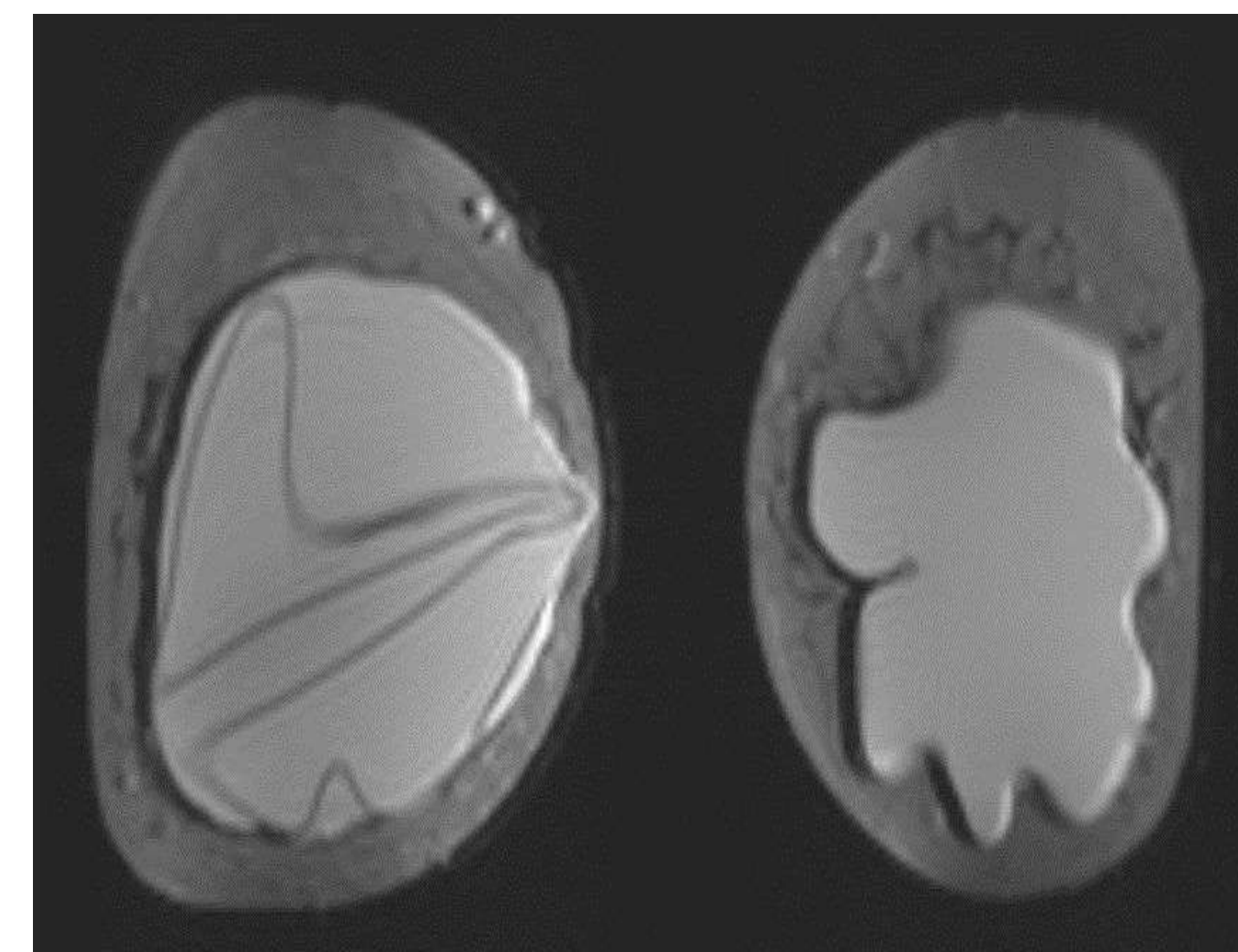


Fig3. Rupture of the prosthesis, MRI (T2) Linguine sign

Results: The results of the research can serve as a basis for developing a customized imaging algorithm for these patients and diagnose breast implant complications through medical imaging methods, finally estimating the sensitivity, specificity and effectiveness of each imaging method separately and also in complexity.

Conclusions: Breast MRI represents the modality of choice for evaluation of implant integrity and associated pathology in symptomatic patients. It can also provide additional information in patients with breast implants and persisting symptoms despite negative USG findings.

Keywords : MRI of the mammary gland, BI-RADS.

Methods	Sensitivity	Specificity
Breast ultrasound	56%	77%
Breast MRI	77%	94%