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## ULTRASOUND-GUIDED VACUUM-ASSISTED RESECTION: REPORT OF A CASE SERIES

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**Objective:** This study aims to report a series of cases of lesions that were probably benign (ACR<sup>®</sup> BI-RADS 3) and with a low degree of suspicion (ACR<sup>®</sup> BI-RADS 4A) submitted to vacuum-assisted resection for diagnostic and therapeutic purposes. **Methods:** From August 2020 to January 2022, 16 patients underwent ultrasound-guided 10-gauge vacuum-assisted needle resection under local anesthesia. The biopsy needle was positioned according to the echographic view of the lesion, in order to obtain the fragments by suction. After the procedure, a titanium clip was positioned demarcating the site. **Results:** We performed 16 vacuum-assisted resections in lesions whose largest diameter varied between 0.4 and 2.5 cm (median=1.4 cm and standard deviation (SD)=0.66). We obtained samples whose measurements of the set of fragments varied between 2.2 and 3.6 cm (median=3.0 cm and SD=0.37). Of the 16 cases, 15 histologies were benign, predominating fibroadenomas and having 2 complex sclerosing lesions. Only 1 ductal carcinoma *in situ*. We had 1 case of hematoma with clinical repercussions and 1 case of increased bleeding at the skin incision site, both managed conservatively with good evolution. **Conclusion:** In our case series, vacuum-assisted resection allowed the investigation and, in most cases, the necessary therapy for the management of BI-RADS 3 and BI-RADS 4A lesions when the histology was benign and provided sufficient diagnostic data for the conduction of the case of carcinoma *in situ*, in which the conservative surgery performed maintained the same histological diagnosis. Vacuum-assisted resection can, in selected cases, replace a diagnostic and/or therapeutic surgical procedure, reducing morbidity and costs in the investigation and treatment of breast lesions, with minimal complications.

**Keywords:** Ultrasound.