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## A Plea for Defining a Uniform Standard Order in Reporting Details of a Whole Breast Ultrasound: The Point of View of Two Breast Surgeons?

Sadaf Alipour\*<sup>a,b</sup>, Farzaneh Golfam<sup>c</sup>

<sup>a</sup> Breast Disease Research Center, Tehran University of Medical Sciences, Tehran, Iran

<sup>b</sup> Department of Surgery, Arash Women's Hospital, Tehran University of Medical Sciences, Tehran, Iran

<sup>°</sup> Mostafa Khomeini Hospital, Shahed University, Tehran, Iran

Breast Imaging Reporting and Data System (BIRADS) was introduced by the American College of Radiology (ACR) in 1993 and has since undergone several modifications. It offers a common language between radiologists for describing breast lesions, and between radiologists and clinicians to communicate their findings. The first version of BIRADS considered only mammography interpretation and report, but the subsequent versions have included ultrasound and MRI of the breast as well.<sup>1</sup> BIRADS for ultrasound is evolving continuously in order to provide a constant and helpful guide for radiologists.<sup>2</sup> Using BIRADS and the ultrasound lexicon have improved interobserver agreement between breast radiologists in interpreting breast ultrasound findings.<sup>3</sup> While BIRADS for ultrasound was introduced in the fourth version of BIRADS in  $2003^2$ , some items have been added or modified in the fifth version in 2013. Briefly, these consist of the addition of a subsection entitled "general considerations" which provides general data like image quality or anatomic considerations; deletion of the "lesion boundary" descriptor; defining "posterior features" instead of "posterior acoustic features" and "intraductal calcifications, calcifications in a mass and calcifications outside of a mass" in lieu of "macrocalcifications"; inclusion of new descriptors under "special cases"; rearrangement of several terms under "associated features" instead of "surrounding tissue"; re-definition of terms describing vascularity; and adding descriptors related to elastography.<sup>4</sup>

Address for correspondence: Sadaf Alipour, M.D.

Address: Breast Disease Research Center- Sadaf Building (Building of Cancer Institute Clinics)- Cancer Institute- Imam Khomeini Hospital Complex, Keshavarz BLV, Tehran, Iran. Tell: +98 21 61192761 Email: <u>sadafalipour@yahoo.com</u> Checklists or templates for a structured report are also developing quickly with the aim to offer consistent and reusable data formats<sup>2</sup>, and provide accuracy and comprehensiveness concurrently with simplicity<sup>5</sup> for the clinician. Particularly they aim to ease comparisons between successive imaging reports coming from different radiologists, as one of the main objectives of BIRADS.<sup>6</sup> A structured breast ultrasound report would provide a consistent form for clinicians that can also lessen the risk of malpractice.<sup>5</sup>

Whole breast ultrasound is used as a helpful adjunct to screening mammography, and the practice parameters have been defined by ACR.<sup>7</sup> The description of each finding in this modality includes a large number of details, and consequently it may show itself as a complex report.

As oncologic and breast surgeons who regularly benefit from breast ultrasound reports for management purposes of our patients, we believe that the outline and the order in which the descriptors come in the written report are extremely important in making it more easily understandable, and allowing a more practical and straightforward comparison with subsequent reports. In fact, the organization of the radiologist notes in the report might make it clear and user-friendly, or ambiguous and complex. We can imagine a whole breast ultrasound which delineates several masses, and, according to BIRADS, describes dimensions, localization, shape, orientation, margin, boundary, echo pattern, posterior features, and the effects on the surrounding tissues for each mass. Along with other findings, the whole report is categorized as BIRADS 3. The clinician who sees this report and the follow-up ultrasound performed some time later in another center would have to compare each individual finding between the two reports. If findings and



details are written and explained in different orders and manners, the comparison would be both timeconsuming and ambiguous.

Unity among different reports of the whole breast ultrasound to make them easily understandable and comparable can only be provided by standardization of the written report format. This means that in order to make the breast ultrasound report more helpful for the clinicians, a uniform framework with a simple and reasonably arranged order of mentioning the findings and details ought to be defined as a complement to the present standards and descriptors of BIRADS. We believe that this format could also positively affect the practice of radiologists when comparing their findings with previous breast ultrasound reports of the same patient. Also, adding a summary about the findings to the final impression at the end of the reports could make it easier for the clinicians to follow the report.

Meanwhile, a study is being conducted at Tehran University of Medical Sciences to design and suggest a suitable outline; the results will be hopefully published in near future.

## **Conflicts of Interest**

There is no conflict of interest to declare.

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