Improving Concordance Documentation for Breast Lesions

Results of a Quality Improvement Initiative in a Community Hospital Setting

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Background

- Image-guided percutaneous core needle biopsy of breast lesions has become the standard for obtaining a tissue diagnosis for benign and malignant breast disease.
- There is a possibility of false-negative results
- Lack of documentation and identification of discordance on biopsy can lead to missed diagnoses and potentially poor outcomes.
- In our community hospital, it was observed that imaging and histopathological concordance was not always documented on all patients undergoing ultrasound-guided breast core biopsies.

Methods

- Retrospective chart review for all patients undergoing ultrasound guided breast core biopsy at Cleveland Clinic-South Pointe Hospital from 1/1/2022 to 5/12/2022 (Group 1)
- An interdisciplinary meeting was held on 5/12/2022 and a lack of standardization it was identified among our radiologists regarding documentation practices.
- All radiologists agreed on a work flow that was efficient, optimal, and followed American College of Radiology Practice Parameters in providing documentation of concordance in their procedure notes once histopathologic diagnosis was finalized.
- Data was then collected retrospectively from 5/13/2022 to 10/15/2022 (Group 2).
- The two groups were compared using descriptive statistics given our sample size was not ample enough to run parametric tests.

Aim/Purpose

Improve the documentation of histopathologic diagnosis on all ultrasound-guided breast biopsy reports.

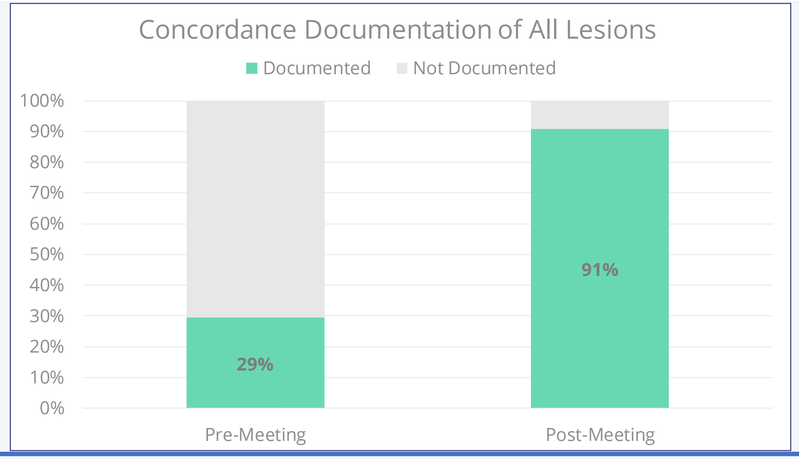

Figure 1: Concordance documentation of all biopsied breast lesions from 1/1/2022 to 5/12/2022 (Pre-Meeting) and from 5/13/2022to 10/15/2022 (Post-Meeting). Concordance documentation for benign and malignant lesions increased by 62% (from 29% to 91%)

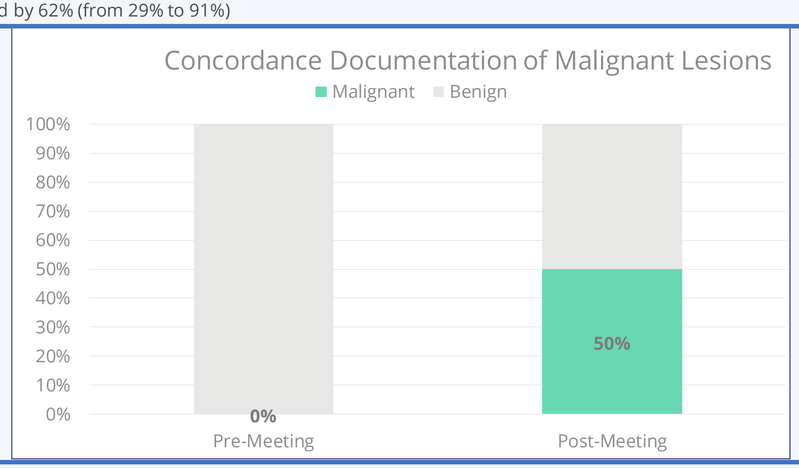

Figure 2: Concordance documentation of malignant lesions from 1/1/2022 to 5/12/2022 (Pre-Meeting) and from 5/13/2022to 10/15/2022 (Post-Meeting). Concordance documentation for malignant lesions increased by 50% after implementation of a standardized protocol.

Results

- 39 patients underwent ultrasound-guided biopsy of breast lesions noted on diagnostic mammography.
- 100% of our patients were born female and their average age at biopsy was 62.
- 97% of our patients identified as female vs 3% who identified neither as female nor male.
- 67% of our patients were African American, 31% were Caucasian, and 2% were each Hispanic and "Other".
- Group 1 had 17 patients and Group 2 had 22 patients.
- **Documentation of all lesions was 29% in Group 1 vs 91% in Group 2.**
- **Benign histopathology documentation improved from 56% in Group 1 to 100% in Group 2.**
- **Documentation of biopsy-proven malignant lesions was 0% in Group 1 vs 83% in Group 2.**

Conclusion

- Documentation of concordance or discordance between imaging and histopathology is important to ensure no missed diagnoses of benign or malignant breast pathology
- Utilization of Six-Sigma Methodology to ensure best practices in work flow for radiologists can improve documentation rates of concordance in a community hospital setting.
- Interdepartmental communication between breast surgery, radiology, pathology, and oncology is important to ensure best practice guidelines are implemented in the care of breast cancer patients

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