
EDITORIAL

Imaging and Clinical Management of Breast Cancer: Marriage of Radiology and Oncology

WCW Chu

Editor-in-Chief, *Hong Kong Journal of Radiology*

Greetings from the Editorial Board of *Hong Kong Journal of Radiology* (HKJR).

We thank you all for patiently awaiting this second issue of Volume 18 of the Journal that has a specific theme: breast imaging and oncology.

I would like to take this opportunity to explain the evolving thoughts behind this new initiative of your Journal.

Due to the unique membership composition of the Hong Kong College of Radiologists, which includes all clinical professionals whose practice involves ionising radiation, it is the vision of the Board to position HKJR as one of the key journals to serve both the radiology and oncology communities of the Asian-Oceanic region. It aims to encompass all fields of radiology that include diagnostic radiology, interventional radiology, nuclear medicine, and clinical oncology.

This year, the Board has decided to introduce a new feature to the Journal. Certain issues will focus specifically on a certain disorder / body system and will be comprised of invited reviews, original articles, pictorial reviews, and case reports relating to that particular theme. This is the first of such issues and focuses on breast imaging and oncology.

The radiology review article by Yu et al¹ highlights some of the recent advances in breast imaging and their application in clinical practice. In addition to the recent technological advances in existing imaging modalities — such as positron emission mammography, contrast mammography, elastography, 3-dimensional / contrast enhanced / automated whole-breast screening by ultrasound (US), magnetic resonance (MR) spectroscopy — other new state-of-the-art applications such as optical imaging, cone-beam

computed tomography, MR-US navigation, and breast-specific gamma imaging are also briefly discussed. These developments will have a significant impact on the future accuracy of diagnosis for breast cancer. The oncology review article by Yeo² provides up-to-date information about the systemic treatment of triple-negative breast cancer, which is a distinct breast cancer subtype that presents a therapeutic challenge. The role of potential treatment strategies, in particular platinum compounds and PARP inhibitors that potentially improve the outcome for this group of patients are reviewed.

The original oncology article by Chow and Ngan³ in this issue gives a comprehensive review with 15-year experience of male breast cancer in a tertiary institution of Hong Kong. As opposed to the more commonly encountered female breast cancer, the majority of male breast cancer patients present with early-stage disease. These patients have an excellent long-term survival outcome following treatment strategies established for female breast cancer. The authors suggest that this satisfactory survival outcome may be attributed to earlier stage at diagnosis and hence a high chance of disease eradication after radical treatment, as well as the higher tamoxifen compliance in our locality despite the unpleasant treatment-related side-effects.

The original radiology articles in this issue highlight the interesting findings of different modalities of breast imaging. These studies originate from institutions in Hong Kong, Korea, and Thailand. The Journal therefore serves as a platform for exchanging knowledge and experience within the radiology community of the Asian-Oceanic region.

The article by Fok et al⁴ illustrates the introduction of a one-stop clinic in one of the largest breast referral centres in Hong Kong. Although the diagnostic

accuracy of breast cancer is much enhanced with the advent of imaging technology, the major limiting factor for effective clinical management is how to triage patients with a high suspicion of breast cancer for prompt imaging service, histological confirmation, and definitive surgery. This article shares the success of implementation of a breast one-stop clinic in a single institution. Their data can serve as a local reference for other hospitals with a similar programme.

The article by Kim et al⁵ illustrates the authors' experience in sonographic visibility of suspicious microcalcification-only breast lesions and the feasibility of biopsy under US guidance. As shown by this paper, sonographically visible microcalcifications are more likely to be malignant and percutaneous US should be performed at the same time as diagnostic US. This approach can alleviate the need for scheduling another appointment for stereotactic biopsy and can provide a 'one-stop' diagnostic imaging service and hence facilitate surgical planning.

The article by Chatpitanrut et al⁶ reminds us of the physiological and hence radiological changes that occur in female breasts during pregnancy and lactation. This is a nice pictorial overview of the sonographic and mammographic features of commonly encountered conditions during pregnancy and lactation. Familiarity with the imaging spectrum of breast disorders during these specific times for female patients helps radiologists to provide correct diagnosis of breast cancer and avoid unnecessary intervention in benign lesions.

Two articles study imaging features related to breast imaging modalities in our daily practice. The article by Wan et al⁷ examines the background parenchymal enhancement pattern in preoperative MR imaging of the breast for breast cancer patients. This article illustrates a commonly encountered diagnostic dilemma in daily practice of breast MR imaging. It alerts radiologists to the potential pitfalls in interpreting breast MR imaging and provides evidence-based data about the impact of a false-positive interpretation. The article by To et al⁸ reviews incidental breast masses on US that are non-

palpable and mammographically occult. The data are reassuring in that most of these lesions belong to low BI-RADS categories. They are either pathologically benign or show no change on intermediate-term follow-up.

The case reports^{9,10} present interesting breast cases with distinct radiological features that definitely 'catch' the eyes of radiologists. All these cases have final histological proof and can serve as part of a collection in the teaching file of breast radiologists.

The introduction of a theme-based issue of the HKJR marks our determination to strive for the betterment of our Journal, merging the expertise of both radiologists and oncologists in the management of clinical problems. It is always the privilege of the Editorial Board to have your unfailing support. Your opinion of this innovative change is always appreciated.

REFERENCES

1. Yu WL, Sitt JC, Fung SY, Tang AP. Recent advances and application of breast imaging in clinical practice. *Hong Kong J Radiol* 2015;18:99-110. [crossref](#)
2. Yeo W. Treatment horizons for triple-negative breast cancer. *Hong Kong J Radiol* 2015;18:111-8. [crossref](#)
3. Chow JC, Ngan RK. Male breast cancer in Hong Kong: 15-year experience from a tertiary institution. *Hong Kong J Radiol* 2015;18:119-24. [crossref](#)
4. Fok WS, Poon WL, Chu KM, Lee CY, Lee CW, Tse KS, et al. A study on the performance of breast One-Stop Clinic in Queen Elizabeth Hospital. *Hong Kong J Radiol* 2015;18:134-40. [crossref](#)
5. Kim TE, Kim DB, Jung JH, Lee EK. Sonographic visibility and feasibility of biopsy under ultrasound guidance of suspicious microcalcification-only breast lesions: a single-centre study. *Hong Kong J Radiol* 2015;18:125-33. [crossref](#)
6. Chatpitanrut P, Kongmebhol P, Muttarak M. Imaging appearances of breast disorders during pregnancy and lactation. *Hong Kong J Radiol* 2015;18:160-8. [crossref](#)
7. Wan WS, Lee CY, Lui CY. Impact of background parenchymal enhancement in preoperative magnetic resonance imaging breast assessment for women with newly diagnosed breast cancer. *Hong Kong J Radiol* 2015;18:141-5. [crossref](#)
8. To VY, Lee CY, Chan CX, Fung SL. Incidental breast masses on ultrasound: what are their characteristics and clinical outcome? *Hong Kong J Radiol* 2015;18:146-50. [crossref](#)
9. Abdullah N, Sridharan R, Saeid A, Rose IM, Annuar ZM. Popcorn-like calcification in the breast: more than meets the eye? *Hong Kong J Radiol* 2015;18:152-5. [crossref](#)
10. Yu WL, Wu C, Chau HH. Mimicker of breast cancer: mammary fibromatosis. *Hong Kong J Radiol* 2015;18:156-9. [crossref](#)