

Agoraphobic diagnosis of breast cancer and detection of breast cancer.

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Abstract

Breast cancer is the leading cause of cancer-related morbidity and mortality in women worldwide. Early diagnosis and effective treatment of all types of cancer are critical for a good prognosis. Patients with smaller tumor sizes at diagnosis have significantly higher survival rates and significantly less likely to have their cancer fatal. Therefore, many new techniques for early detection of primary tumors, distant metastases and recurrent disease are being developed for effective breast cancer therapy. Theranostics are emerging as a new paradigm for simultaneous diagnosis, imaging, and treatment of cancer. It has the potential to provide timely and enhanced patient care through personalized treatment. Nanotheranostics enable the embedding of cell-specific targeting moieties, imaging agents, and therapeutic agents into a single formulation for effective therapy.

Keywords: Acquired resistance, Adenoma, Benign, Blood cells, Cardiomyopathy.

Introduction

Breast cancer has a very long history and was first diagnosed by the ancient Egyptians over 3500 years ago, around 1500 BC. BC, reported. Today, breast cancer is her second most common type of cancer and the leading cause of cancer-related deaths among women in the United States. According to the American Cancer Society, about 281,550 women will be diagnosed with breast cancer in 2021, and she expects 43,600 women in the United States to die from breast cancer. Early diagnosis of this disease is important for effective treatment and prognosis, as we observe significantly lower mortality rates and higher survival rates in patients with smaller tumors at diagnosis [1].

Therefore, early detection of breast cancer and accurate assessment of lesions are the focus of all imaging studies. Breast imaging is used almost exclusively for cancer detection, diagnosis, clinical management, and assessing breast implant integrity. As a conventional medical imaging modality, ultrasound has long played an important role in breast cancer detection, image-guided biopsy, and lymph node diagnosis. Mammography, ultrasound, magnetic resonance imaging scintillation mammography, single photon emission computed tomography and positron emission tomography are other commonly used imaging modalities law [2,3]. The need for preoperative systemic therapy is determined based on breast cancer diagnosis and assessment of extent. Breast cancer treatment requires targeted and effective therapies with minimal off-target side effects. Breast cancer is a global problem, so there should also be a focus on reducing global disparities in diagnosis, multimodal treatment and access to new medicines [4].

METHODS

Breast Specific Gamma Imaging:

Breast specific gamma imaging a molecular breast imaging approach, is a specialized nuclear medicine imaging test that allows detection of sub-centimeter and mammographically occult breast cancer with a sensitivity and specificity comparable to MRI. In BSGI, a radiotracer such as Technetium Tc99m Sestamibi is injected into the patient's bloodstream and the breast is visualized using a special camera. Unlike mammography, BSGI is unaffected by breast density.

Ultrasound

Although mammography is a gold standard for breast cancer imaging, because of its limitations regarding dense breasts, another supplementing screening tool is required. Ultrasound is a supplemental tool that may be utilized to analyze some breast changes in women with dense breast tissues, as well as suspicious areas not seen on a mammogram. Advantages of this technique include its wide availability, as well as no patient exposure to radiation. At the same time, however, it is limited by a number of factors [5].

Conclusions

In this review, we have highlighted some of the common methods of breast cancer diagnosis and treatment and the role of the emerging area of breast cancer theranostics in integrating diagnostics and therapy within a single platform to provide patient-specific therapy. Early detection and treatment of breast cancer is crucial in the reduction of breast cancer mortality rate. The methods of diagnosis and treatment of breast cancer has undergone tremendous changes over the

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past two decades, and the focus is on managing and treating the disease with minimal patient discomfort, increased patient compliance, and reduced off-target side effects.

References:

1. Ebeid NI. Egyptian Medicine in the Days of the Pharaohs. General Egyptian Book Organization; 1999;56(1);158-64
2. Igel RL, Miller KD, Jemal A. Cancer statistics, 2019. CA: a cancer journal for clinicians. 2019;69(1):7-34.
3. Duncan W, Kerr GR. The curability of breast cancer. Br Med J. 1976; 2(6039):781-3.
4. Juanpere S, Perez E, Huc O, Imaging of breast implants: A pictorial review. Insights into imaging. 2011; 2(6):653-70.
5. Basilion J. Breast imaging technology: Current and future technologies for breast cancer imaging. Breast Cancer Res. 2001,3:13–14.