Stereotactic Breast Biopsy

Essay

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List of Abbreviations

Abbr.	Title

FNA : Fine-needle aspiration

DCIS : Ductal carcinoma in situ

US : Ultrasonography

VABB : Vacuum-assisted breast biopsy

MLO : Mediolateral oblique

MRI : Magnetic resonance imaging

USG : Ultrasound guided

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Introduction

Stereotactic biopsy, also known as stereotactic core biopsy, is a biopsy procedure that uses a computer and imaging performed in at least two planes to localize a target lesion (such as a tumor or microcalcifications in the breast) in three-dimensional space and guide the removal of tissue for examination by a pathologist under a microscope. Stereotactic core biopsy makes use of the underlying principle of parallax to determine the depth or "Z-dimension" of the target lesion. Stereotactic core biopsy is extensively used by radiologists specializing in breast imaging to obtain tissue samples containing microcalcifications, which can be an early sign of breast cancer ***(Adam & Dixon, 2008).***

Lumps or abnormalities in the breast are often detected by physical examination, mammography, or other imaging studies. However, it is not always possible to tell from these imaging tests whether a growth is benign or cancerous. A breast biopsy is performed to remove some cells from a suspicious area in the breast and examine them under a microscope to determine a diagnosis. This can be performed surgically or, more commonly, by a radiologist using a less invasive procedure ***(American cancer society, 2015).***

Several diagnostic trends have occurred during the last several years, including breast screening mammography,