Title:

Mammography

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Introduction:

Every 12 minutes, a woman dies because of breast cancer. In today's world, with the advancement of technology in all industries, including medicine, it has improved and made people's lives easier. One of these devices, which reduces memorization, is screening, mammography, and we're going to look at some articles about that device.

Summary of review of articles one and two:

The dose received on mammography is one of the biggest concerns in the world. Every 12 minutes, a woman dies of breast cancer.

Conclusion: Based on the results of this study, it seems that despite the advantages of digital mammography over conventional mammography, the average dose of glands of digital mammography devices is higher than conventional mammography devices.

The main concern in mammography tests is the rate of patient absorption dose and image quality. Today, mammography is the most effective way to diagnose breast cancer with an accuracy of about 83 to 97 percent depending on the patient's age and the only way to detect microcalcification.

Mammography Radiography is the soft tissue of the breast and is mainly used to detect and diagnose breast cancer, as well as to assess the palpable masses and intangible lesions of the breast.

Using mammography in the early stages reduces the risk of dying from breast cancer by 35 percent. The only FDA-approved diagnostic method that can help detect breast cancer in women without symptoms and signs of the disease.

To calculate the average dose in conventional mammography and digital mammography and to compare the dose of these two devices in the conditions used by the devices, little research has been done. Despite the benefits of digital mammography over conventional mammography, if the average dose of the digital mammogram is higher than that of a conventional mammogram, digital imaging can eventually lead to exacerbation or breast cancer.

Digital and non-digital mammography: In conventional mammography, the patient's photo is recorded on a radiology film and printed during the process of emergence and confirmation. In digital mammography, the patient's image is recorded on a computer. Digital photo capture increases photosensitivity.

With a special mammography program and the use of a special 5-megapixel monitor, it is possible to enlarge the photo and increase its recognition capability. With the same program, the negative mammogram image can be turned into a positive image. This will blacken the calcium deposits seen in the normal white picture and make it easier to detect.

The interface between the two methods is the CR technique. In this method, mammography is performed with a normal device on a special film. The movie cassette is then inserted into the CR device and converted to a digital image. This method is similar to scanning a regular photo and converting it to a digital photo. Therefore, the basic technique of this method is the same as the usual mammography technique, and it does not have the high accuracy of digital mammography. Studies have shown that the CR technique is even lower than conventional mammography, and is very accurate, especially in the case of calcium deposits, which are a common finding of cancers detected during screening.

To determine the dose of endocrine glands for each mammogram, a set of information must be collected that includes the thickness of the compressed breast CBT, KVp, mAs selected either manually by the operator or automatically by the device.

(MGD) MGD or glandular dose rate cannot be measured directly. To estimate the dose of MGD glands, it is necessary to measure the radiation output of the device. In dosimetry, mammography is performed to measure the output on the phantom and then the MGD is obtained by irradiating the ESAK input skin. ESAK measurement should be performed in the range of available kilovolts. Distances other than 4.5 cm are used to correct the distance.

In 2014, Edward and colleagues in the United States compared the effective parameters in digital mammography with conventional mammography on 49,528 patients and found that the dose of digital mammography was 22% lower than conventional mammography.

Both patients and physicians believe that digital dose mammography is less effective than conventional mammography and has fewer side effects.

Conclusion:

Based on the results of this study, it seems that despite the advantages of digital mammography over conventional mammography, the average dose of glands in digital mammography devices is higher than conventional mammography devices.

An overview of Article 3:

One of the largest mammogram studies to date, involving 90,000 women over a quarter of a century, has raised new doubts about screening for women of all ages. The same is true for women who have mammograms and those who do not

Screening is harmful: One in five cancers with a mammogram does not pose a threat to a woman's health and does not require treatment such as chemotherapy or radiation.

Researchers report that the study led to an even deeper polarization between those who believe that regular mammograms save the lives of people, including many patients with breast cancer, and that the number of this process from researchers who say the evidence is low. At least it doesn't

Dr. Russell P. Harris, who was not involved in the study, said: "These women are upset and they should be upset. Mammography should not be in the form of a slice, but fans and experts oppose it. The Cancer Society's director-general of cancer, Cinder Wenders, said the community had formed a specialist committee that reviewed all mammography studies, including Canadians. He added that combined mammography data showed that the death rate from breast cancer was at least 15. The percentage should be reduced for women in their 40s and at least 20% for older women

Dr. Harris continued:

One in 1,000 women who start screening at age 40 and two at age 50 who start and three who start at age 60 prevent breast cancer death and cancer, Dr. Wender added, while the treatment is improving. Helps reduce breast cancer mortality As mammography did, with early cancers, in addition to mammography to prevent breast cancer, medications such as tamoxifen can be used to reduce mortality and cancer. It becomes a breast

Dr. Mette Kalager and other experts point out that clinical trials are randomly screened for women who are screened.

Dr. Callager, an epidemiologist and screening researcher, said there was evidence that the results were inconsistent with previous studies. With better treatments, such as tamoxifen, early detection of cancer was less important. Lack of awareness of mammography screening disease

Over time, most researchers will be able to calculate the calculation for the first time. Excessive diagnosis or diagnosis of cancers that never kill women but lead to treatments that include chemotherapy and radiography, and cancers. Some grow slowly or some of them are so small that they disappear on their own, but after being diagnosed with cancer, it is not possible to tell if they are dangerous or not, so doctors treat them all.

Dr. Anthony says that if a precancerous patient called a ductal carcinoma is implanted on the spot, the diagnosis will be too close to all three cancers. It is not recommended for breast augmentation, but it is usually treated with surgery, including mastectomy or breast removal. The benefits of mammography are discussed, and the only country that has not suggested it is Switzerland.

It is recommended that people in this period have a limited time, albeit indefinitely

Dr. Peter Jones stated that mammography did not reduce the overall mortality rate due to the disease, but rather increased the diagnosis and led to false positives and bios.

Pessaries are unnecessary

Dr. Johnny went on to say that the story of mammography is not easy. Even experts such as Dr. H Gilbert Welch were surprised by Switzerland's efforts to reconsider its use.

In the United States, about 37 million mammograms are performed each year at a cost of about $ 100 per mammogram. Dr. Callager says mammography is very common. The two trials of screening were almost identical in terms of overdiagnosed diagnosis and had almost no reduction in breast or prostate mortality, according to Balin.

And last but not least, the headline made you think that the evidence for mammography should be stronger because most screening countries support mammography and most people are discouraged by PSA screening.

Review of the fourth article:

Background and Aim: Breast reconstruction is the determination of the new position and shape of the breast. A young breast without symptoms of ptosis may necessarily be ideal for women of all ages.

However, there are no indications for breast placement depending on age.

Using the average age-based data from three-dimensional modeling, we examined and reported the appropriate position of the breasts by age in breast reconstruction.

Methods: We photographed 110 breast cancer patients using a three-dimensional scanner and calculated the measuring instruments. Data from three-dimensional simulation images of all patients were reconstructed from the data.

Breasts of any age group were divided into healthy and affected breasts.

Results: There was no difference between the values of age groups 30, 40, and 50.

Major changes were observed in the age group of the '60s compared to the age groups of 30, 40, and 50.

Statistically, there was no difference between healthy and infected breasts.

Conclusion: This study showed that special attention should be paid to age-related changes during breast reconstruction surgery for women aged 260 years. We believe that the method used in our study of the average breast shape based on age group can be used as a reference or analgesic to ensure that the reconstruction of natural breasts matches the patient's age.

1. Introduction Breast reconstruction, breast reduction, and healthy mastocytosis are often necessary to achieve two-way symmetry of the breasts.

The most important element in preoperative planning in such situations is to determine the position and shape of the new breast.

Textbooks document breast measurement data for what is considered a beautiful breast and can be used as an indicator during pre-breast planning surgery.

As you age, your breasts get bigger, the upper pole of the upper pole disappears, and the symptoms of ptosis appear.

Using age-based data from 3D modeling, we examined the appropriate position of the breasts based on age in breast reconstruction.

2. Patients and Methods: We took photos of 110 patients with breast cancer who visited our outpatient clinic from April 2014 to April 2015. The right breast was affected in 56 patients, in 48 patients the left breast was affected, and in six patients both breasts were affected. Age ranged from 26 years to 73 years with an average of 47.5 years. All patients

with breast cancer were from Stage Il, and none had a history of preoperative chemotherapy or breast surgery, including a partial biopsy history. However, the abdominal history of the needle is not considered because it does not appear to affect the shape of the breast. Before surgery, we calculated the average measurements of the following eight items from 30 cases. Width; Height; Drawing a distance from the sharp gap to the nipple (S-N); The distance from the surface of the nipple to the nipple (M-N); Distance from nipple to N-IMF; And the angle is drawn by a line drawn from the sternal slit to the nipple line (angle N; Fig. 1). Of these, S-N and M-N were determined from XY aircraft numbers.

3D N-IMF measurements were incorrect and linear measurements were performed instead.

Photos were taken using a KINECT 3D scanner designed for high-precision 3D scanners.

During the analysis

Measurement data were grouped by age group and calculated with the relevant tools. For each measured measurement, age groups were compared using the Steel-Dass test.

Breasts from all age groups were divided into healthy and damaged breasts, and the mean of different measurements was calculated. A value of p 05 5.05 was statistically significant.

All statistical analyzes were performed using EZR.

- Data were analyzed using standard statistical methods. The measurements were compared for each age group, except for the 20s and 70s age groups, where n-1 was present. The mean values for age groups 30, 40, and 50 did not show any specific pattern in terms of age and there was no statistically significant difference between the groups. However, in the age group of the 1960s, although height, M-, and angle N showed no significant statistical differences compared to age groups 30, 40, and 50, other measurements showed a statistically significant difference and increase. They showed a major. Measured data show major differences with increasing age, more associated age-related changes in the breast

4 - Discussion during breast reconstruction, one of the most important elements during preoperative planning is to determine the position and new shape of the breast.

There are several surgical procedures to reduce breast and mastocytosis, including the surrounding trunk, vertical, and reverse. Some studies on how to create a nipple position have reported that a line is drawn from the arch or the cleft gap to the nipple, a certain distance is determined along that line, * and the position is based on the position of the International Monetary Fund or point. The middle humerus is determined.

In general, as the breasts get older, they become larger, complete polarization. Reggultult ptosis classification is commonly used to evaluate these changes. "

It is thought that the effects of aging are due to the weakening of the support system for attractive breast ligaments and not just to the wear and tear of the skin.