

Breast tissue density's role in detecting breast cancer

May 1, 2023

In news— A study has found that while breast density declines with age, a slower rate of decline in one breast often precedes a cancer diagnosis in that breast.

Key findings-

- **Scientists have long known that dense breast tissue is linked to an increased risk of breast cancer in women.**
- Scientists at Washington University in St. Louis analyzed breast density changes over a 10-year period in 10,000 women who were free of cancer when the study started.
- Some 289 women were diagnosed with breast cancer in that time; the study compared changes in their breast tissue to those in 658 similar women who did not develop breast cancer.
- Breast density was higher from the start in the women who went on to develop breast cancer, and density declined in all women over time. But **when each breast's density was measured separately, scientists found a significantly slower decline in density in breasts that developed cancer**, when compared with the other breast in the same patient.

Significance of the findings-

- The findings **might provide an individualized and dynamic tool for assessing a woman's breast cancer risk.**
- Breast density is now an acknowledged risk factor for breast cancer, albeit one of many. Dense tissue also makes tumors harder to detect in imaging scans.
- Dozens of states have started requiring mammography centres to notify women if they have dense breast

tissue. . But **this is the first study to measure changes in density over time and to report a link to breast cancer.**

- Although women are provided the information about breast density and the risks associated with it, the study suggests that information could be better used.

About breast cancer-

- Breast cancer is a disease in which **cells in the breast grow out of control.** There are different kinds of breast cancer.
- It can occur in women and rarely in men.
- Women who have inherited changes (mutations) to certain genes, such as BRCA1 and BRCA2, are at higher risk of breast and ovarian cancer
- Symptoms of breast cancer include a lump in the breast, bloody discharge from the nipple and changes in the shape or texture of the nipple or breast.
- Its treatment depends on the stage of cancer. It may consist of chemotherapy, radiation, hormone therapy and surgery.

Further reading:
<https://journalsofindia.com/carboplatin-drug-to-treat-breast-cancer/>