

Mammographic density of breasts

The effect of hormone therapy

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An increase in the density of the breast parenchyma is a well described entity as a result of hormone therapy.¹ When an increase in mammographic density occurs, this is an early event which will start directly after the administration of HRT. The most common cause of a diffuse increase in the breast density, is weight loss.² The reason for this seems to be a relative reduction in the mass of fatty tissue in relation to the gland.

Generally speaking, it is unusual to see variation in the density of breasts in the same patient as a function of time.

Oza reported in 1993 that alcohol use has a positive independent effect on mammographic density. This is due to alcohol's effect of increasing oestrogen levels.³

Two cases are presented of patients who received baseline mammograms before the commencement of hormone therapy and then underwent follow up mammograms.

Material

Two female patients of ages 58 and 62 years respectively received baseline mammograms before the commencement of hormone replacement therapy. The first patient received a mammogram after a year and the second patient after approximately 9 months.

On both follow-up mammograms there was a diffuse non-specific increase in the relative density of the breasts with an absolute increase in the glandular element of the mammograms (Figures 1a and 1b).

Neither patient experienced any weight loss during the interval.

It has been reported that between 17 and 27% of patients will develop a denser pattern on HRT. In practice however, the incidence seems to be much lower. According to Kopans the incidence approaches 5% of cases. Kopans further reports that in exceptional cases, cysts may form in the breasts as a result of HRT. The increase

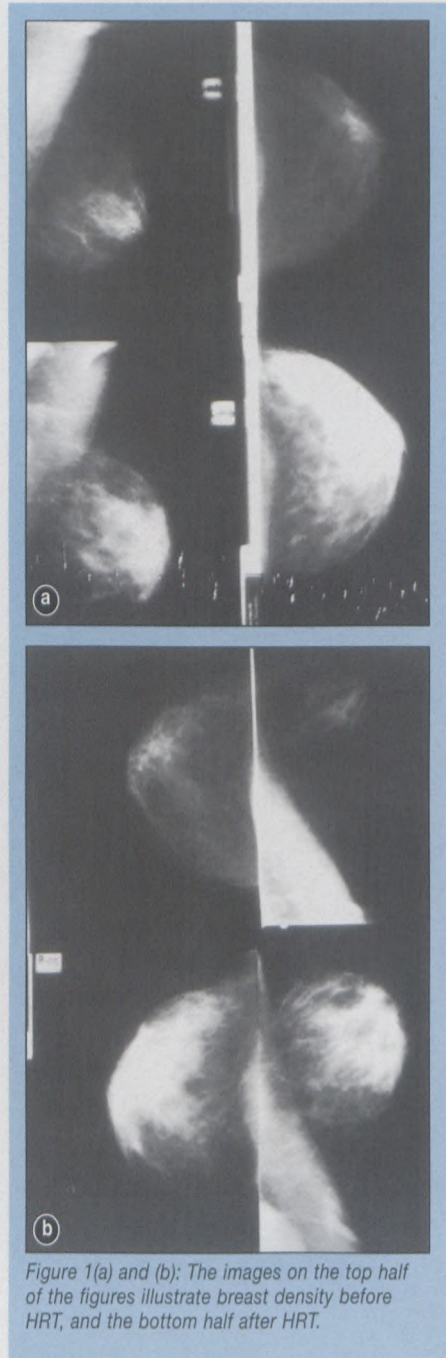


Figure 1(a) and (b): The images on the top half of the figures illustrate breast density before HRT, and the bottom half after HRT.

in density of the breasts as a result of hormone replacement can also follow the administration of vaginal creams.

Discussion

The cases described are two examples of a diffuse increase in the glandular element of breast tissue following hormone replacement therapy in postmenopausal women. According to the latest literature, the finding is more

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