

## Breast change perception in women after smoking cessation. A pilot study

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### ABSTRACT

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**Aims and background.** There are several barriers to smoking cessation that are unique to women. Compared to men, women report lower levels of motivation to quit and greater perceived difficulty with cessation. However, recent studies might favor commitment by women to quit through higher risk perception related e.g. to the development of premature facial wrinkling or the decrease in mammographic density due to cigarette smoking.

**Methods.** A pilot study to evaluate the perception of breast change after cessation and its possible motivational effect on maintenance was carried out. We interviewed 25 premenopausal women who had quit  $\geq 1$  year before. We obtained information from the women and discussed changes in breast size and fullness. The two groups of women with and without breast change were statistically compared using the non-parametric Mann-Whitney test (continuous variables) and the Fisher test (categorical variables).

**Results.** Median age was 41 years (range, 30-49 years). Median carbon monoxide (CO) before quitting was 18 ppm and median pack years (PY) was 22.5; both parameters characterize a category of mild smokers. Sixteen women (64%) reported breast changes 6 months after quitting smoking. This outcome was paralleled by only moderate effects on weight or body mass index (BMI) increase after quitting. Notably, of the 16 women with breast change, only 3 (19%) with a normal baseline BMI showed a BMI increase to  $>25$ .

**Conclusions.** Within the limitations of the small size of a pilot study, these results indicate that premenopausal women experience subjective perception of change in breast size after smoking cessation, which may not be totally explained by weight gain. Further studies are needed to understand the effect, if any, of such perception on the motivation to quit smoking.

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**Key words:** breast gain, smoking cessation, motivational tools.

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