

conference abstract

observational

people

Breastfeeding reduces long-term risk of heart disease in mothers

Women who breastfed their babies are less likely to develop heart disease later in life, according to findings to be presented in Lyon, at the [European Society of Endocrinology](#) annual meeting, [ECE 2019](#). The study also suggests that the protective effect on heart health is increased in women who breastfed for longer periods of time. These findings provide further evidence for the long-term health benefits of breastfeeding and that women should be encouraged to do so when possible.

Breastfeeding has previously been shown to reduce the risk of postpartum depression and the risk of certain cancers in women. It has also been established that breastfeeding can help mothers to maintain a healthy body weight and regulate their blood sugar. These benefits are likely to be related to the higher levels of the hormone, prolactin, in breastfeeding mothers. More recently, studies have indicated that prolactin reduces the risk of diabetes, which is a major risk factor for cardiovascular disease. Cardiovascular disease is a leading cause of death among women worldwide but the long-term protective effects of breastfeeding on heart disease risk have not been adequately investigated.

In this study, Professor Irene Lambrinoudaki from the University of Athens and colleagues, measured markers of heart and blood vessel health in postmenopausal women, in relation to their history of breastfeeding. After adjusting for other cardiovascular health risk factors, including body weight, age, cholesterol levels and smoking habits, the data indicated that women who had breastfed had significantly lower levels of heart disease and heart disease risk indicators. This effect was even more significant in women that had breastfed for longer periods of time.

Prof Lambrinoudaki says, “These findings indicate that breastfeeding lowers the risk of heart disease in women. However, this is an association study only, we are now interested in looking at establishing the underlying causes of this protective effect.”

Prof Lambrinoudaki comments, “If we can show causality for the protective effect, women will have one more reason to nurse their infants, beyond the already documented benefits of breastfeeding for short- and long term health of both them and their children.”

Prof Lambrinoudaki’s team are now investigating the molecular mechanisms of how prolactin affects blood sugar, which is a major risk factor for heart disease. This research could uncover new mechanisms to target in the prevention of heart disease for everyone, not just breastfeeding women.

Abstract

GP32

Breastfeeding is inversely associated with subclinical atherosclerosis in postmenopausal women

George Kaparos¹, Michael Apostolakis², Eleni Armeni², Areti Augoulea², Stavroula A. Paschou², Konstantinos Panoulis², Panagiotis Bakas², Georgios Georgiopoulos³, Dimitrios Delialis³, Efthymios Deligeoroglou², Kimon Stamatelopoulos³, Irene Lambrinou²

¹Biochemical Laboratory, Aretaieio Hospital, Medical School, National and Kapodistrian University of Athens, Athens, Greece. ²Second Department of Obstetrics and Gynecology, Aretaieio Hospital, Medical School, National and Kapodistrian University of Athens, Athens, Greece. ³Vascular Laboratory, Department of Clinical Therapeutics, Alexandra Hospital, Medical School, National and Kapodistrian University of Athens, Athens, Greece

Introduction: The aim of this study was to evaluate the association between a personal history of lactation and indices of subclinical atherosclerosis and arterial stiffness in postmenopausal women.

Patients and Methods: This cross-sectional study included 283 postmenopausal women. Sonographically assessed indices of vascular function [pulse wave velocity (PWV)] and vascular structure [intima-media thickness (IMT), atherosclerotic plaque presence] were tested for possible association with the history of lactation.

Results: The duration of lactation ranged between 1 and 80 months. PWV was negatively associated with the duration of lactation (b-coefficient=-0.127, p value=0.038), independently of age, BMI, LDL-cholesterol levels, smoking and arterial pressure. Subclinical atherosclerosis was associated with lactation (OR=0.958, p value=0.042), age, BMI and arterial pressure. Women who had lactated for more than 6 months presented significantly decreased mean common carotid IMT compared with women who had lactated for 1 to 6 months (0.72 ±0.13 mm vs 0.68 ±0.13 mm, F=4.267, p value=0.041), independently of other traditional cardiovascular risk factors.

Conclusions: Postmenopausal women with a personal history of breastfeeding present decreased arterial stiffness and atherosclerosis, even after adjustment for traditional cardiovascular risk factors. If causality is confirmed, these findings may indicate a protective effect of lactation against subclinical atherosclerosis in later life.

Notes for Editors

1. The poster “Breastfeeding is inversely associated with subclinical atherosclerosis in postmenopausal women” was presented on Sunday 19 May 2019, at the European Congress of Endocrinology at the Lyon Convention Centre, Lyon, France.
2. The European Congress of Endocrinology is being held at Lyon Convention Centre, Lyon, France on the 18-21 May 2019. See the [full scientific programme](#).
3. The [European Society of Endocrinology](#) was created to promote research, education and clinical practice in endocrinology by the organisation of conferences, training courses and publications, by raising public awareness, liaison with national and international legislators, and by any other appropriate means.