

MOTHERISK UPDATE

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Do silicone breast implants affect breastfeeding?

ABSTRACT

QUESTION One of my patients has silicone breast implants. She gave birth to a healthy baby boy but is afraid to breastfeed because she read in a magazine that the baby might be affected by silicone secreted in the milk. How should I advise her?

ANSWER Neither silicone nor its components could be measured in the breast milk of women with silicone implants. Your patient should be able to breastfeed safely.

Millions of women worldwide have silicone breast implants, either for esthetic reasons or as part of reconstructive surgery (eg, after mastectomy). During the last few years, claims have been made that silicone implants cause connective-tissue autoimmune disease in women,¹ but repeated scientific reviews have failed to confirm these reports.²⁻⁴ Subsequently, several reports (mainly from one group) suggested a sclerodermalike syndrome exhibited as esophageal dysfunction in the children of mothers with silicone implants.⁴ These studies were heavily criticized, mainly for selection bias (ie, the children studied were chosen from a certain interest group and were not randomly selected).⁵ Despite this, silicone-implanted women were advised through popular magazines and Internet sites (but not through the peer-reviewed medical literature) not to breastfeed.

In one case, an American physician suggested through his website that, in addition to not breastfeeding, women

should consider treating their infants with the antimalarial agent hydroxychloroquine (Plaquenil), which is used as a second-line drug for connective-tissue diseases. Hydroxychloroquine was never approved for use in children and is highly toxic to them in overdose. Above all, the suggested "treatment" was offered for a disease not generally accepted by the medical community.

The advantages of breastfeeding to the health and well-being of infants are well documented.⁶ It has been shown in both developing and developed countries that breastfeeding has a protective effect in terms of both infant morbidity and mortality. Most women who have breast implants and have preserved

mammary glands can breastfeed; women who obtain implants after mastectomy cannot.

The Motherisk Program is one of very few programs worldwide that counsel women on the safety of breastfeeding while taking drugs or being exposed to chemicals. In addition to critical review of all published data, we conduct original studies in areas where such information does not exist.⁷ The notion that women were told not to breastfeed led us to publish the first measurements of silicone in the breast milk in two of our patients. There was no evidence of exposure in their infants.⁵ Subsequently, Semple and colleagues measured silicone levels in the milk of 15 silicone-implanted women and compared them with levels in 34 women with no implants.⁸

Results indicated similar concentrations of silicone in women with implants (55.5 ± 35 ng/mL) and controls (51.0 ± 31 ng/mL). The mean silicone level measured in store-bought cow's

Do you have a question about the safety of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to Dr Gideon Koren by fax at (416) 813-7562; they will be addressed in future Motherisk Updates.

Published Motherisk Updates are available on the College of Family Physicians of Canada website (www.cfpc.ca). Some articles are published in *The Motherisk Newsletter* also.

Motherisk questions are prepared by the **Motherisk Team** at the Hospital for Sick Children in Toronto and edited by **Dr G. Koren**, Professor of Pediatrics in Pharmacology, Pharmacy, and Medicine at the University of Toronto. **Dr Ito** is a member of the Motherisk Team.

CLINICAL CHALLENGE ♦ DÉFI CLINIQUE

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milk was 708.9 ng/mL, and in 26 brands of commercially available infant formula was 4402 ng/mL. The authors concluded that lactating women with silicone implants have levels of silicone in their breast milk and blood similar to control women.

Physicians should support women with breast implants who wish to breastfeed, because there is no evidence of any fetal risks. In contrast, formula feeding is associated with increased morbidity among infants compared with breastfeeding. ♦

Acknowledgment

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