

Breastfeeding and cataracts

by Maxine Lipner EyeWorld Senior Contributing Writer



One way breastfeeding may benefit women

Many mothers today breastfeed, noted Sangshin Park, PhD, assistant professor, Alpert Medical School, Brown University, Providence, Rhode Island. “According to the CDC, 35.9% of mothers breastfeed their infants until 12 months of age, and 24.9% of mothers exclusively breastfeed their infants through 6 months,” he said. Study results published in the *American Journal of Ophthalmology*¹ indicate that mothers who breastfeed may have a lowered risk of cortical cataracts. Investigators found that those who breastfed the most children for the longest duration had a 44% lower risk of developing such cataracts, Dr. Park reported.

The investigators were spurred to undertake this study by the connection to diabetes mellitus, one of the major risk factors for age-related cataract, Dr. Park explained. There had been indications that children who were breastfed longer tended to have a lower risk of diabetes later in life. “We hypothesized that an increased number of breastfed children and a longer duration of

breastfeeding would be associated with decreased risk for age-related cataract,” Dr. Park said.

Studying nursing mothers

Included in the study were 3,821 women ages 50 and above who had previously given birth to one or more children. Those included also provided information on their breastfeeding experience and had been examined for age-related cataract in the Korea National Health and Nutrition Examination Survey, a survey conducted by the Korean Centers for Disease Control and Prevention to collect health and nutritional status data on a nationally representative population in South Korea from 2010–2012, Dr. Park explained. The information was composed of a health interview, a nutrition survey, and a health examination survey.

As part of the study, participants were subdivided into four groups according to the number of children they had breastfed and the length of time. The number of children breastfed ranged from 0 to more than 4, and the number of months of breastfeeding ranged from 0 to more than 61, Dr. Park noted.

Investigators sought to determine whether those included

developed any cataract subtypes including cortical, nuclear, anterior subcapsular, posterior subcapsular, mixed, or any type of age-related cataract. Some of the other factors considered included the patient’s current age, smoking status, alcohol consumption, education level, household income, sun exposure, family history of any eye diseases, and whether or not they had diabetes mellitus.

Cumulative payoff

Investigators found that breastfeeding more children over a long-term period was associated with a lower risk of cataract formation. When women breastfed 2 children or fewer, 9.4% of their cortical cataract formation might be caused by insufficient breastfeeding, with a 10.7% risk when breastfeeding continued for less than 36 months, Dr. Park reported. Those who breastfed 4 children or more had a 44% lower risk for cortical cataract formation, compared to those who didn’t breastfeed at all or did so for only one child.

“Women who breastfed for 36–60 months in the second highest quartile or for 61 months or more, the highest quartile, had 39% and

47% lower risks, respectively, for cortical cataract compared to those who breastfed 16 months or less,” Dr. Park said, adding that the cortical cataract risk decreased by 5% for every additional year the women continued to breastfeed.

Dr. Park found the results a bit surprising. “Although we hypothesized that breastfeeding would influence developing age-related cataract, we did not expect that we would see such a clear relationship between breastfeeding and cataract formation,” he said.

He theorizes that this could be attributed to several factors. “The fat accumulated during pregnancy could be used to produce energy for lactation, and changes in weight during lactation may reduce the risk of metabolic diseases,” Dr. Park said. “Release of the oxytocin hormone while breastfeeding may also be directly associated with the inhibition of developing metabolic diseases in later life.” Such metabolic diseases may in turn act on age-related cataract through mechanisms associated with accumulation of advanced glycation end products of lens protein, endothelial dysfunction, oxidative stress, and inflammation.

“Women should understand that a decreased number of breastfed children and breastfeeding duration are associated with increased risks for cortical cataract in the postmenopausal period,” Dr. Park said. In addition, he advised practitioners to pay greater attention to possible cortical cataract formation in women who did not breastfeed or did so for a short time.

Going forward Dr. Park would like to see the study findings confirmed in other populations. “Moreover, prospective and longitudinal studies are required to clarify the mechanisms of breastfeeding-related cataract formation,” he said. **EW**

Reference

1. Park S, Choi NK. Breastfeeding and maternal age-related cataract. *Am J Ophthalmol.* 2018;192:124–130.

Editors’ note: Dr. Park has no financial interests related to his comments.

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