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■ Editorial

Breastfeeding and Sarcopenia in Later Life

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Breastfeeding has positive effects on women's health, such as a reduction of the incidence rates of ovarian and breast cancers and the risk of all-cause mortality,[1] hypertension, diabetes, hyperlipidemia, and cardiovascular disease.[2] The breastfeeding rate in Korea declined from 1994 to 2000, but it progressively increased from 2000 to 2012. The data in 2012 revealed that the exclusive breastfeeding rates at 3, 4, and 6 months were 50.0%, 40.5%, and 11.4%, respectively.[3]

The term 'sarcopenia' was first introduced in 1989, with more recent definitions incorporating losses of muscle function and mass that accompany aging.[4] The importance of sarcopenia arises from the evidence linking poor muscle function to increased all-cause mortality rates.[5]

Several studies have evaluated bone health or obesity in association with breastfeeding, but no previous study has assessed the relationship between muscle mass in later life and the lactation period in older women.

In this issue, Kim et al.[6] analyzed the association between the breastfeeding period and sarcopenia using data from the Korea National Health and Nutrition Examination Survey (KNHNES) 2010–2011. They showed that sarcopenia has a negative association and obesity has a positive association with prolonged breastfeeding in women older than 60 years and that there was a positive association between the duration since last delivery and sarcopenia. Further, the incidence of obesity increased and that of sarcopenia decreased with an increase in the lactation period.

Although the relationship between breastfeeding and sarcopenia is not fully understood, the estrogen level and insulin resistance might mediate this association. Thus, the authors adjusted the model for various childbirth parameters, such as number of deliveries, age at first delivery, age at last delivery, and duration since last delivery.[6]

This study analyzed data from a representative national database (KNHNES) that included dual-energy X-ray absorptiometry data to measure whole and regional body compositions and showed, for the first time, an inverse relationship between lactation period and sarcopenia in later life.

Similar to that reported by several previous sarcopenia studies using KNHNES data that were published in the *Korean Journal of Family Medicine*,[6-11] sarcopenia was found to result from multiple factors, and breastfeeding is also likely to affect sarcopenia along with other childbirth parameters.

To elucidate the relevance of variables affected by multiple factors, the researchers should adjust for many confounding variables or balance these variables well between groups. Similar to that in previous studies, the authors used multiple logistic regression analysis. Alternatively, they could have also used a matching method such as the propensity score matching method to adjust for confounding variables, especially using birth parameters and hormone exposure (menarche, menopause, and hormone replacement therapy).[12]

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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