Introduction

Bone mineral density (BMD) is affected by various factors related to calcium homeostasis. Pregnancy and breastfeeding are associated with increased maternal calcium loss and have a deleterious effect on osteoporosis. During pregnancy, approximately 30 g of calcium is demanded to develop the fetal skeleton until birth, and 300–400 mg of maternal calcium is lost daily through breast milk during breastfeeding.

The bone loss associated with breastfeeding is substantially restored within 6 months after weaning. However, it is unclear whether bone loss is completely restored in extended breastfeeding women. Furthermore, number of deliveries and age at the time of delivery may also influence the risk of osteoporosis.

2. General characteristics of groups according to breastfeeding duration

3. Association between breastfeeding duration and lumbar spine BMD and osteoporosis

4. The association between childbirth parameters and lumbar spine fracture

Conclusions

We found a negative correlation between duration of breastfeeding and BMD in the lumbar spine. Moreover, the prevalence of osteoporosis was significantly higher in those that breastfed for more than 18 months. Neither the number of deliveries nor age at the time of delivery was associated with BMD at any site.

Taken together, the results of the present study suggest that prolonged breastfeeding may be an important risk factor for osteoporosis.