

Chapter 12



PREGNANCY AND LACTATION ASSOCIATED OSTEOPOROSIS

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Introduction

Osteoporosis is a disease that mostly affects people over 50 years of age and is caused by estrogen deficiency and age-related bone loss after menopause. Pregnancy-associated osteoporosis, or pregnancy and lactation-associated osteoporosis (PAO) is a rare condition characterized by low bone mineral density and insufficiency fractures during pregnancy or postpartum period. The reason has not been fully elucidated. It is not clear whether it is a result of pregnancy or it is coincidental. It is differentiated from transient osteoporosis of the hip by the frequent occurrence of vertebral fractures. The presence of low back pain in most pregnant women may cause the clinician to overlook this rare disease. To understand pregnancy-associated osteoporosis, it is necessary to review the changes and adaptations in calcium metabolism during pregnancy and lactation.

Changes in Calcium Metabolism and Bone During Pregnancy

A healthy term newborn contains approximately 25-30 g of calcium, the majority of which is transferred to fetus in the last trimester. While the average daily calcium transition is 2-3 mg/day in the first trimester, this transition is approximately 250 mg/day in 36 weeks of pregnancy.⁽¹⁾ Intestinal calcium

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in medical treatment can shorten the time required for recovery.⁽³²⁾ DXA and MRI findings typically return to normal within 2-12 months, with a 20-40% increase in BMD.⁽⁸⁾

Insufficiency fractures and development of femoral head avascular necrosis are rare possible complications.

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