

## **P189. Obstetric-gynecological risk factors for osteopenia in the postpartum period**

*T Novikova (RU) [1]*

Obstetric-gynecological risk factors for osteopenia in the postpartum period. Zazerskaya I.E., Novikova T. V. , Khazova E.L., Kuznetsova L.V.

Almazov National Medical Research Centre, Saint Petersburg

**Introduction.** The problem of the prevalence of osteopenia and osteoporosis is poorly understood. The causes of the disturbance of bone metabolism in young women associated with impaired ovarian function, the violation of the menstrual cycle, the course of pregnancy and the postpartum period are being studied. It should be noted the special role of vitamin D.

**Aim.** To assess the risk factors for the development of osteopenia in the puerperas of St. Petersburg.

**Materials and methods:** Cohort retrospective and prospective study. A total of 108 puerperas living in St. Petersburg were examined. The average age is  $30.64 \pm 3.3$  years. An analysis of the course of pregnancy and the creation of an individual card for the course of pregnancy and the postpartum period were carried out. Estimation of the amount of calcium and vitamin D consumed on the basis of the questionnaire developed. The double-energy x-ray osteodensitometry was used to measure the BMD in 3 parts of the skeleton.

**Results.** Two groups of puerperas were analyzed. The first group consisted of puerperas with osteopenia in one of the three parts of the skeleton (N = 79). The second group of a woman with a normal BMD(N=29)?

In the 1st group: The average age of the menarche is  $13.5 \pm 1.7$  years, in 2 group years -  $12.4 \pm 1.8$  years, body mass deficit in the adolescent period is (14) 22% and 2 (6%) in 2 group, the decreased calcium intake is 60 (76%), opposite 9 (31%), disturbance of the menstrual cycle disorders 11 (14%) opposite 2 (6%) , spontaneous abortions - 7, opposite 2 (6%) in 2 group, overweight in 20 (25%) opposite 9 (31%). Pregnancy: Gestational diabetes - 22 (28%), preeclampsia -9 (11%), autoimmune thyroiditis-20 (25%). 2 and 3 trimester fell on autumn-winter -52 (66%), fractures during pregnancy at 2. In 2 group gestational diabetes -7 (24%), preeclampsia-2 (6%), autoimmune thyroiditis-3 (10%).

**Conclusion:** The risk of developing osteopenia and osteoporosis in the postpartum period is higher in women with menstrual irregularities and weight loss or obesity. Complications during pregnancy increase the risk of fractures. It is necessary to identify risk groups and prevent fractures in women after childbirth.

[1] Federal Almazov Research Center, Saint-Peterburg, Russia