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# Studying The Possibilities of Non-Drug Rehabilitation and Rehabilitation of Female Athletes After They Have Suffered Childbirth

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### Abstract

In this research article, its author presents the results of the conducted study, devoted to the implementation of a cycle of restorative, non-drug treatment and rehabilitation, in female athletes of reproductive age, in the early and late postpartum period. The methodology of rehabilitation measures is described, including a set of methods and means that were used in female athletes in the study group. The obtained results are presented, practical recommendations are given.

**Kew Words:** female athletes; childbirth; postpartum period; rehabilitation; non-drug rehabilitation treatment; special physical exercises; therapeutic exercise

### Introduction

The issues concerning the reproductive function of women, its preservation and restoration, especially after childbirth, both physiological and pathological, are always very relevant and in demand. Also, the issues of studying the features of functioning and restoration of the reproductive function in female athletes, which are directly dependent on their active sports activities and quick returns to active training and the competitive process, are important.

It is well known that not only physiological childbirth, but also its pathological course, require intensive rehabilitation measures and restorative treatment, carried out both in the early postpartum period (the first hours and several days after childbirth), and in the late postpartum period (the first and subsequent weeks / months) after childbirth [1-8]. The volume and content of restorative treatment is directly influenced by the condition of women after childbirth, the presence of any postpartum complications (temperature, inflammatory processes, previous surgical interventions during childbirth, the consequences of late gestosis, trauma during childbirth, etc.). It should be noted that if a significant number of articles and scientific studies, both domestic and foreign authors, are devoted to the issues of postpartum rehabilitation of women, then there are practically no articles concerning restorative therapy in female athletes after childbirth, and the available individual reports are of a general empirical, sometimes simply statistical nature, not covering this problem in the proper volume [1-8].

### Aim of study

The purpose of this author's study is an attempt at a more profound, thoughtful approach to the issue of selecting practical methods and means of

rehabilitation, as well as non-drug rehabilitation treatment, for female athletes in the early and late postpartum period.

### Hypothesis of the study

In the process of methodological preparation for this study, its author put forward the following working hypothesis - in female athletes of reproductive age, after physiological childbirth, in the early and late postpartum periods, it is possible to use alternative methods, non-drug restorative treatment and their physical rehabilitation, as opposed to conservative, classical rehabilitation methods. In this regard, the author of this study proposed for practical use his version of such rehabilitation and recovery in female athletes.

### Methods and means of research

In conducting this study, its author actively used the method of literary-critical analysis of available sources of information, including research articles and scientific-methodological materials of other authors and researchers, on the issue being studied. on the issue being studied. We used such research methods as analysis of available literary sources, interviews, birth histories + postpartum discharge summaries, medical care cards from antenatal clinics, in which athletes, after childbirth, underwent the rehabilitation complex proposed by us. To carry out rehabilitation measures, we used, in the early postpartum period: breathing exercises, therapeutic exercises, early getting up and walking, isometric exercises for the muscles of the pelvic floor and perineum. In the late postpartum period, in the absence of contraindications, we used exercise therapy complexes according to the method of E.V. Vasilyeva (1970) and F.A. Yunusova [1-3, 6-8], a set of special Kegel exercises and a fitball [1-8]. All women participating in the

experiment gave their voluntary, both verbal and written, consent to participate in it.

The study involved 37 female athletes of adolescent and early reproductive age, of whom 32 (86.49%) had physiological births at 38-40 weeks of pregnancy, 2 (5.41%) had operative births (caesarean section), and 3 (8.11%) had second-degree traumatic perineal ruptures during delivery.

### Results of the study and discussion

Today, all maternity hospitals use early getting up - in the first hours after childbirth (with physiological course of childbirth), and in the first day after childbirth, after minor obstetric surgeries (episiotomy) and perineal tears of the 1st-2nd degree. After cesarean section (without complications) and perineal tears of the 3rd-4th degree, on the 2nd and/or 3rd day after childbirth (individual, situational approach). With physiological course of childbirth, the exercise therapy instructor (usually a nurse or midwife) shows, explains/demonstrates to the woman in labor a set of breathing exercises and isometric exercises, performed both in bed and in the postpartum ward, gradually introducing sitting on the bed and walking in the ward. The duration of the set of breathing and isometric exercises is selected individually - from several minutes to 15-20 minutes, depending on the patient's well-being [1-3, 6, 8]. All our sportswomen were taught this set of exercises in the early postpartum period (the first 24 hours after delivery) and actively used it (2 to 4-5 times a day) during their stay in the maternity hospital. Most actively and more often (up to 8-10 times a day), this set was used by female sportswomen who had undergone a cesarean section. The limitation (but not cancellation!) in the frequency and activity of performing physical exercises was the presence of pain and unpleasant painful sensations in the places of postoperative sutures and ruptures.

In the late postpartum period (72 hours or more after childbirth), both in the conditions of a women's consultation (physical therapy rooms/halls) and independently at home, female athletes, after a preliminary demonstration of a set of exercises by a physical therapy instructor and under his supervision, and subsequently at home, independently, patients performed the physical therapy sets proposed to them according to the method of E.V. Vasilyeva, and patients with problems of the pelvic floor muscles, with their postpartum traumatic complications - a set of exercises according to the method of F.A. Yunusov, to strengthen the muscles of the perineum and pelvic floor [1-3, 6-8].

We recommended the frequency of exercise therapy sessions at least twice a day, for 20-30 minutes per session, with mandatory monitoring of wellbeing. Patients after operative delivery and grade II perineal ruptures underwent rehabilitation and recovery complexes during the first month after delivery in the conditions of the therapeutic physical training room of their antenatal clinic at their place of residence, with mandatory examination by a visiting obstetrician-gynecologist at least once every 7-10 days. Patients after physiological delivery and with sutured grade I perineal ruptures, during the first 7-10 sessions in the therapeutic physical training room of the antenatal clinic, and then independently, at home, with a control examination once every 7-10 days.

All women in labor were actively recommended to do exercises on a large fitball (in the physiotherapy room and/or at home), as well as special exercises according to the Kegel system, in order to restore and strengthen the muscles of the vagina, perineum and pelvic floor, as well as for the active prevention of urinary, gas and fecal incontinence) [1-3, 6-8]. Our patients with a benign course of the late postpartum period began a gradual return to

training during the second month after childbirth, gradually increasing their intensity. Patients after operative childbirth were limited in lifting weights and in exercises for the anterior abdominal wall during the first 2 months after childbirth. They actively used modern elastic postpartum bandages [1-8].

Observation of female athletes in the postpartum period was carried out individually, in periods from 3 to 6 months. By the third to fourth months after childbirth, all female athletes who had given birth were already actively training, having entered the full volume of physical activity, each in her own sport, in the 4th to 6th month after childbirth, which is confirmed and corresponds to the results of studies by other authors who studied this issue [1-8].

### **Conclusions**

Female athletes, in the first hours/days after childbirth, both physiological and pathological, need to get up earlier and individually determined physical activity, both in bed and within the postpartum ward.

In the late postpartum period, we recommend the active use of a set of postpartum exercise therapy exercises according to the method of E.V. Vasilyeva and F.A. Yunusov.

Important importance in the complex of postpartum rehabilitation measures should be given to the use of exercises on a fitball and a set of special exercises according to the method of A. Kegel.

Naturally, the selection of the rehabilitation complex, its volume and duration are selected strictly individually, with direct consideration of all indications and contraindications for its use.

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