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Water immersion

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Abstrakt

Immersja wodna jest jedną z metod prowadzenia porodu stosowaną od starożytności. Chociaż wymaga odpowiedniego zaplecza lokalowego oraz wyszkolonego personelu medycznego stanowi coraz częściej wybieraną alternatywę dla klasycznej formy porodu. Niesie ze sobą wiele korzyści zarówno dla rodzącej jak i noworodka. Niezbędne jest prawidłowo przeprowadzone badanie celem właściwej kwalifikacji do porodu w wodzie uwzględniające ewentualne przeciwwskazania.

Abstract

Water immersion is one of the methods of birth used since antiquity. Although it requires adequate facilities and trained medical personnel, it is an increasingly popular alternative to the classical form of labor. It brings many benefits for both emerging and newborn. However, proper examination is necessary in order to qualify to water birth taking into account any contraindications.

Introduction

Births in water have been well known since antiquity. It is known from numerous messages that this was the way of birth giving for women born in Egypt, Indians in Panama and the Maori of the areas of New Zealand [1]. In the 60s of 20th century pioneer popularizing births in water was Russian Igor Charowski [2]. The first work on the advantages of termination of pregnancy in the water was published in France by dr Michał Odent [3]. In Europe, coming into the world in the aquatic environment began to be propagated since the mid-80s. In Poland, the first water birth was led by Tadeusz Laudański on the 1 June 1996 in the Department of Lodz [4]. Half a year later, on the 28th January 1997, Dr. Ryszard Poręba continued the idea of using water immersion during birth at the Clinic in Tychy [1].

Water Immersion is a type of hydrotherapy used during natural childbirth with the beneficial effects of heat. Pouring warm water locally increases blood circulation what causes the relaxation of skeletal and smooth muscles, increase extensibility of tissue, and causes a general relaxation effect on the formation and as a consequence releases pain [5]. During maternal labor a bath with hot water or hot water pouring may be used. Water immersion is one of the most frequently used and best known non-pharmacological methods of alleviating

labor pain, especially in Western countries [6-9]. In Poland, more and more women are choosing to take advantage of the possibility of relaxation in water during labor.

Water birth

Before using hydrotherapy during labor a medical history and physical examination should be performed, in order to exclude possible contraindications for this kind of labor. During the separation of cervical woman can use 3/4 bath, half-bath and pouring under the shower. A bath during the first stage of labor should not last longer than 30 minutes, and the water temperature should not exceed 37 Celsius degrees. After this fetal heart rate should be measured [10-12]. After the bath water, rapid dilation of the cervix is being observed. In the case of a bath or 3/4 half-bath the position taken by the patient is very important. The buoyancy of the water increases the pressure on the diaphragm and a uterus, therefore it is recommended to female to lie or kneel in supported position [13,14].

Stay in the water during the second stage of labor substantially alleviates pain and improves the efficiency of pressure [15]. The method of receiving labor is the same as for conventional labor. The child should be taken out of the water occiput leading. After the birth of the newborn, time in the water should be limited to a maximum few seconds. After extraction with water, the child should be placed on the mother's abdomen, protected against getting cold and the removal of the umbilical cord should be exactly the same as during the traditional birth.

The third stage of labor is usually carried out on maternity bed or in the bathtub after the release of water [1]. So far, not all maternity units are equipped to conduct birth in water. This is due to both the lack of proper equipment as well as the need for special training of medical staff.

Contraindications for delivery in water

Women in physiologically extending pregnancy without known risk factors are eligible to give birth in water. [16]. Due to temperature, water immersion is not eligible to women with severe heart disease, uncontrolled hypertension, severe anemia, and infection of the body and the general cutaneous infections. This is due to the possibility of unwanted, paradoxical reaction from the blood vessels. Furthermore, the possibility of giving birth in water disqualified women diagnosed with: vaginal bleeding, fetal macrosomia, abnormal position and abnormal fetal cardiotocographic [1].

Scientific evidence

There are many scientific studies on the positive effects of water immersion during labor. The warm water helps rapid dilation of the cervix and easier relaxation of the pelvic muscles and perineal [17]. It is easier for a woman to take desirable analgesic position [18]. The baby's head is coming down faster in the birth canal, therefore childbirth is less painful [19,20]. Moreover duration of phase I and II of labor is much shorter[21]. Polish Gynecological Society stresses that birth in the water results in a significant shortening of the duration of the second stage of labor, with no effect on reducing the total number of injuries intrapartum which was confirmed in the recommendations. Surveys have shown no statistically significant difference in the function of the pelvic floor muscles [22,23]. Studies indicate that in the warm water bath during the period of labor significantly reduces the level of intensity of pain, which consequently limits the supply of epidural anesthesia and other analgesics. Use of the water in the second stage of labor makes the thrust is more effective [24]. During the water immersion greatly suppress the renin - aldosterone - angiotensin system and vasopressin, which induces diuresis and natriuresis. As a result, there is a reduction of edema and hypotension [25-27]. Many authors emphasize that, in an aqueous environment there is a smooth transition of the child from the uterus filled with amniotic fluid into the water at a constant temperature, which greatly reduces the stress levels of the newborn [28].

Summary

Water immersion is more and more popular form of conducting labor. Undisputed benefits of such forms of labor include: pain reduction, relaxation and relaxing effect and shortening the time of delivery.

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