A MODERN VIEW OF THE PROBLEM OF STRESS-INDUCED FERTILITY

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Summary. Prolonged infertility can cause psychological stress in spouses, which requires the intervention of psychologists, psychotherapists, and sometimes psychiatrists. Purpose: to find out the role of stress in the initiation of infertility in a married couple. Materials and method: to conduct an analysis of modern medical literature on the psychogenic form of infertility. Research results and their discussion
There are data that thanks to the attention and sensitive attitude to the mental state of patients, pregnancy occurred in 60% of cases. Can this be called a placebo reaction? Such a reaction can occur in the initial period of examination of women with probable anovulatory infertility. Psychological examination of a married couple with infertility should not be considered as an examination option, which is resorted to only after the exclusion of organic damage. Psychological and social factors can play a significant role when a woman has pathology of the pelvic organs. To assess the prospects of infertility treatment, the doctor must determine which of the factors - somatic, psychological or social - plays a leading role. Only then can he take the right position in relation to patients and assess the degree of his intervention in complex human problems that may arise in the process of diagnosis and treatment, or when choosing an alternative to parenthood.
Key words: stress-induced infertility, spermogram, ovulation, tubal patency

Introduction. Treatment of infertility in couples is always a controversial issue, sometimes disappointing, sometimes giving the expected result. Doctors of various specialties may be involved in the treatment of a married couple: a family doctor, who must establish the fact of infertility and recommend further examination; gynecologist and endocrinologist, who must develop an examination and treatment plan and establish monitoring of examinations and treatment; a urologist who should be involved in the case of male infertility. Radiologists, narrow specialists in
sperm examination, specialists in histology, immunology and microbiology can take part in the examination of an infertile couple [1]. Prolonged infertility can cause psychological stress in spouses, which requires the intervention of psychologists, psychotherapists, and sometimes psychiatrists. Therefore, the problem of infertility is multidisciplinary.

Without the use of contraception, pregnancy can occur within 12 months in 75% of married couples [2]. Therefore, if pregnancy has not occurred after 12 months of regular sexual life without the use of contraception, the married couple should be considered potentially infertile and referred for examination. It is believed that the couple should be examined at the same time, the examination should be minimal and consist of conducting a sperm analysis in the man, determining ovulation and tubal patency in the woman. Despite differences related to geographic or socio-economic factors, the structure of the causes of infertility is as follows: ovulation disorders – 15%, tubal obstruction – 30-35%, spermatogenesis disorders – 30-35%, combined gynecological diseases and other reasons – 15-25% [1].

**Purpose:** to find out the role of stress in the initiation of infertility in a married couple.

**Materials and methods.** Conduct an analysis of modern medical literature on the psychogenic form of infertility.

**Research results and their discussion.** The numerous methods of solving the problem proposed today are not able to overcome infertility in all couples. Many of them have no obvious reasons that would prevent the onset of pregnancy. It is known that there are practically healthy married couples in which pregnancy does not occur, failures cause them anxiety and destroy their plans. There is data that thanks to attention and a sensitive attitude to the mental state of patients, pregnancy occurred in 60% of cases [3]. Can this be called a placebo reaction? Such a reaction can occur in the initial period of examination of women with probable anovulatory infertility. If this is indeed a placebo reaction, then what role does the psyche play and is it the cause or concomitant factor of infertility. Today, attempts are being made to determine the probable role of psychological factors in the occurrence of infertility and the ways that can help to overcome them. It is extremely difficult or even impossible to prove the existence of a connection between psychological factors and infertility, but there are good reasons to predict their influence on significant deviations of the physiological functions of the body. One of these explanations is the violation of ovulation in patients with anorexia of psychogenic origin, in whom ovulation can be restored after the cure of anorexia. It has been proven that sperm quality worsened in medical students under the influence of exam stress. Violation of ovulation often occurs in young, completely healthy girls who devoted themselves to caring for the sick and had difficulties in the early stages of mastering their profession. We do not believe that the psyche plays a significant role in the infertility of many married couples, however, it is necessary to establish good contact and mutual understanding between the doctor and the spouses, mutual openness and honesty during the period of examination and treatment.

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Only then can he take the right position in relation to patients and assess the degree of his intervention in complex human problems that may arise in the process of diagnosis and treatment, or when choosing an alternative to parenthood [4].

There is a lot of literature on the topic of psychogenic infertility, and sociological works have recently appeared. In fact, as noted by scientists [5], the flow of psychological reasoning contrasts markedly with the small number of well-founded clinical studies. Probably, the most convincing data are in the descriptions of cases of successful treatment by psychotherapeutic methods of individuals and married couples with infertility. Important psychoanalytic formulations were made by Griel A.L.[6]. The results of psychotherapy suggest that the "suppression" of such emotions as depression, anger and fear can be the cause of infertility. New knowledge in the field of neurophysiology and endocrinology reveals psychophysiological mechanisms that justify these reasons. Psychophysiological processes that occur in each family member should be evaluated, and the effects of each person's influence on their partner under certain psychosocial circumstances should be taken into account.

Today, most cases of childlessness are cases of voluntary childlessness, the emergence of which is explained by two major social changes. First, by separating sexual pleasure from reproductive functions as a result of expanding the range of this pleasure, improving the quality and variety of contraceptives, and the wider distribution of various abortive methods. Secondly, by increasing women's rights to choose whether or not to have a child, expanding their sphere of activity and facilitating the possibility of achieving a high social position [2].

Silka L., Kiesler S. [7] conducted a study of voluntarily childless families. In these families, there is a tendency to think carefully about their choice compared to other families and to be more open in talking about this decision with other people. They are probably happier and more successful in their professional activities and no more selfish or immature compared to others. They are also no more materialistic and mercantile than others. Obviously, these families are less in need of social connections, try to go further in life than their parents and engage in more "individual" professions. Women in such families are more independent, self-confident and endowed with healthy skepticism, are less influenced by other people and attach greater importance to personal freedom.

Kaltreider N.B., Margolis A.G. [8] conducted a study of a group of young women who wished to remain childless and used contraceptives for this purpose. The authors found in them a sharply expressed and well-founded awareness of the inability to become a mother, and some evidence that in the family they most likely imagine themselves in the role of a daughter than a young mother. Some authors [4, 5] note that in childless families, spouses tend to be healthier and happier in marriage, and that such families are more stable.

It is possible that it is too early to assess the psychological significance of these changes. However, what is important is that childlessness is a real option for many families who are negative about having children. Families with infertility can also be
included in this category. Moreover, having a free choice to have or not to have children may be welcomed by some individuals whose difficulties, compounded by their low ability to conceive, arise from a sense of detachment from family traditions and public opinion. Any changes that give a woman and her husband time and opportunity to decide for themselves whether or not to have children are obviously positive. Research conducted in recent years suggests that there may be a social similarity between voluntary childlessness and infertility [7].

Women suffering from psychogenic infertility can be clinically divided into three main groups according to the severity and persistence of their resistance to conception. The first group includes women whose infertility can stop spontaneously, already during the examination. The second group includes women with a more persistent "blockade" of conception, which may be the result of some external stressful situation that they feel is unfavorable for motherhood. The third group includes women whose infertility arose as a result of deep and long-term psychosomatic stress, which is associated with the presence of psychogenic fears. Measures aimed at treating their mental health allow us to assume the possibility of pregnancy in the future [9].

Data from recent reviews on the topic hypothesize that the role of psychological factors as the sole cause of infertility is generally overestimated. The authors believe that the identification of unexplained infertility with psychogenic infertility is not justified. For many women, the consequence of infertility is significant emotional stress. This, according to the authors, may make psychosocial counseling necessary in certain cases. Infertility should always be treated as a psychosomatic integrity [9].

Another study examined the relationship between psychological characteristics of couples before treatment (both partners' levels of infertility-related anxiety and stress) and ovarian response during assisted reproductive technology (ART) treatment. A total of 217 heterosexual couples (434 patients) who suffered from primary infertility and underwent the first treatment with DRT were recruited. Psychological variables were assessed using the State Anxiety Scale (STAI-S) and the Fertility Problems Questionnaire (FPI). The number of follicles >16 mm according to transvaginal ultrasound scan data on the 11th day of the examination was chosen as the outcome measure. No association was found between women's anxiety level and infertility-related stress and the number of follicles >16 mm. In addition, partner infertility stress and anxiety did not moderate the relationship between infertility stress, women's level of anxiety, and ovarian response. Reproductive specialists should assure couples that a woman's biological response to ovarian stimulation is not affected by the level of psychological stress of either partner, according to the authors [10].

In another study, the authors concluded that the obtained results challenge the belief that distress prevents successful infertility treatment, giving hope and optimism to many women who feel emotionally responsible for the outcome of DRT [11].

After receiving a diagnosis of infertility, patients describe 4 consecutive stages, which include: feeling embarrassed during the week; indignation and doubt for 2-3 weeks; sexual dysfunctional disorders for 2-3 months and depressive reactions that
can last up to 6 months [12]. This sequence is reminiscent of the change in feelings observed during the severe loss of loved ones.

One of the most useful and reliable is information about the psychopathology of infertility in the works of authors who successfully treat such patients with the help of psychoanalysis or analytically oriented psychotherapy. Deutsch H. [13] and other authors described certain types of women with infertility. 1. Immature, sensitive, picky women, childishlly cranky in relation to their husbands and prone to functional disorders, for example, gastrointestinal ones. 2. Aggressive-dominant women who do not agree to recognize their femininity tend to compete with men. 3. Women-mothers who, rightly or wrongly understanding their husband, feel that they are not able to copy him in children and therefore transfer their maternal instinct to take care of him. 4. Women who devoted their lives to ideological (science, politics) or other emotional interests.

Conclusions. The final conclusion about infertility always traumatizes married couples, no matter what internal conflicts arise in the family against this background. This is traumatic because everyone who is being treated has a genuine drive to procreate, even if that drive is blocked by ambivalence, and the conflict itself is hidden behind the outward concessions to society’s opinion on procreation. This trauma can be very damaging to family relationships when they are already physically and emotionally strained by a long period of testing and treatment. Therefore, the conclusion of infertility always causes a crisis in the family, no matter how much the couple hides it. Under favorable conditions, the first shock leads to a long period of experiences, their resolution and recovery. This sequence is reminiscent of the change in feelings observed during the severe loss of loved ones. In conclusion, we can say that in most cases, psychogenic infertility can be attributed to myths and not to facts, and that more prospective and controlled studies of the influence of psychological factors on female and male fertility are needed. Infertility should always be treated as a psychosomatic whole.

References:


