PSEUDOCYESIS AND COUVADE SYNDROME

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Pseudopregnancy is a condition in which there is a firm belief of a non-pregnant woman in her pregnancy. The disorder also occurs in men. Patients manifest the symptoms and signs of pregnancy. According to DSM IV it is a conversion disorder, under the category of "Somatoform disorders". Pseudopregnancy occurs in patients with determined organic cerebral or endocrinologic pathology, in patients with chronic mental disorders, but also in those who were previously diagnosed with neither organic nor psychic disorders. There is always a wish for pregnancy and a fear from pregnancy at the same time. In any case, the psychological changes are caused by the imbalance of the pituitary-ovarian function of neurotransmitters in the pituitary gland and/or hypothalamus. A combination of psychotherapy, pharmacotherapy with antidepressants or antipsychotics, hormonal therapy and uterine curettage, is effective in almost every patient. Treatment should always be done within a team of other specialists (for instance, gynecologist). The authors emphasize the importance of systematic family psychotherapeutic approach in the treatment of psychotic patients.

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INTRODUCTION AND DEFINITION

Pseudocyesis is a rare psychiatric syndrome. In literature it is also called false pregnancy, pseudopregnancy, hysterical pregnancy, or phantom pregnancy. The term "Pseudocyesis" was introduced by John Mason Good in 1823 based on Greek words *pseudes = pseudo* (false); and *kyesis = pregnancy*. Pseudocyesis is a state in which a woman, who is not pregnant, firmly believes that she is pregnant. At the same time she has almost all the signs and symptoms of pregnancy (Learning Network, 2001; Medscape WWWebster, 1997).

At present times researches have been oriented primarily toward endocrinologic disorders behind the phenomenon as well as the treatment of depression and unresolved mourning that are in close relation to the etiology of pseudopregnancy (Whelan & Stewart, 1990).

The signs of false pregnancy are: irregularity of menses, amenorrhea, abdominal distention, changes in breast size and shape, lactation, enlargement and areolar hyperpigmentation. There are also the so-called medial linea nigra, inverted umbilicus, better appetite and increased weight, and also a typical lordotic posture during walk, morning sickness and vomiting, and insisting on pregnancy. A person can hear the fetal heart; feel fetal movements, worry about the baby's health until the false parturition when she feels muscular contractions. In untreated cases recovery is spontaneous, but often ends in birth pain. In some cases, when a patient finds out she is not pregnant, serious complications can occur in the form of a heavy depressive episode.

The concept of "couvade" is in close connection with pseudocyesis. The expression originates from the French word "couver" meaning "to sit", i.e. metaphorically "to sit on eggs", like a bird. The expression was formed by Taylor in 1865, who wanted to designate customs in some primitive cultures and their taboos associated with childbirth. In this the most important is the belief that the child is exposed to strong supernatural forces. So, while the father expects the child to be born, he lies down into bed and, in order to draw away from the child the attention of super-natural forces, evil spirits and spells, he mimics the pain of labor. Such customs have been described in the preindustrial communities of Indians from North and South America, in Africa, China, Japan, India, Guyana, the Caribbean (Lesser Antilles), in central Brazil and in Basque provinces in France and Spain.

It is important to point out that couvade is in a ritual sense the voluntary and conscious behavior of parents. It is opposite from, in present industrial communities, an unwilling and unconsciously determined phenomenon, when during the wife's pregnancy, raised anxiety, restlessness and

excitement occur in a husband or other near relatives, that intensify with the approach of childbirth. It was recorded in 11% to 36% of cases in fathers when they expected a child to be born (Learning Network, 2001).

Only a few cases of psychotic couvade syndrome were described in literature.

The patients showed somatic symptoms, which included colics, gastric symptoms, indigestion, a want for food, nausea and vomiting, better or weaker appetite, diarrhea, headache, itchiness, muscular tremor, nose bleeding, different subjective pains. Along with these symptoms depression, anxiety, insomnia, irritability, tension, hypochondria, jealousy, depersonalization and derealization have been observed.

Tenyi tried to analyze psychodynamically these occurrences and concluded that in nonpsychotic or psychosomatic couvade syndromes it is a question of identification with the pregnant woman, and of ambivalent stand related to fatherhood, because the fetus is experienced like a rival. Patients also manifest latent homosexuality, partial envy and defense from aggressive impulses. In psychotic cases we can see identification with the fetus, which leads to double identification. The patient identifies himself with a pregnant woman, which leads to identification with the mother, and this reactivates identification with the fetus – through splitting – a bad aspect of dyad relationship. This double identification is the basis of libidinal decathexis based on an early ego defect. In the two cases described, behind the ego defect there was the pathology of a strong mother-child relationship and a submissive father. The analysis of couvade syndrome is important not only to psychiatrists, but also to family doctors and gynecologists (Tényi at al., 1996).

EPIDEMIOLOGY

The phenomenon has been sporadically recorded and described in various locations, times and cultures, among all the races, nations and classes. It was first described by Hippocrates 300 years B.C. After that, in the 16th century the case of Mary Tudor, the daughter of Henry VIII was recorded. In the 18th century it was described in a fanatic religious woman Joanne Southcott, who believed she was going to give birth to a future Messiah. In the last two centuries about 600 cases of pseudopregnancy have been reported. Freud in his autobiographical study described the case of Anne O. and the manifestation of false pregnancy during the final stage of hypnotic treatment done by Breuer (Kaplan & Sadock, 1995). Bivin and Klinger gathered and presented 444 cases of pseudopregnancy in 1937, and Cohen 100 cases the same year. After that, cases like this have been presented individually.

ETIOLOGY

Pseudopregnancy occurs in patients with determined organic cerebral or endocrinologic pathology, in patients with chronic mental disorders, but also in those who did not suffer from any organic or mental disorders. It is mainly a psychological answer to intensive stress in persons who want to have a child and to be pregnant and, at the same time, are frightened by pregnancy. Pseudopregnancy can also start in coincidence with physiological changes, e.g. involution, i.e. climacteric, and occurs often in females at the initial stage of the menopause (Taber's 1997). It certainly has to be taken into consideration as a differential diagnostic category in secondary amenorrhea (Woman's Diagnostic Cyber, 1998). In most cases it was described in persons of 20 to 44 years of age. In several cases only pseudopregnancy was found in younger persons. Selzer describes a case of pseudopregnancy in a six--year-old girl. Her explanation was that the mother is too tired and too busy to have another child. So she decided to do it herself, but in fact, she wanted to lessen her feeling of being abandoned and neglected, deprivation of love and loneliness. In her anamnesis there was no sexual, but mental neglection and abuse by her mother, who was promiscuous, alcoholic and indifferent toward the daughter. Until she was three years old, she lived with her grandmother, without a firm fatherly figure. Since she was three, she lived with her mother and her aggressive friend who abused both of them physically, and locked the girl indoors alone and without food for three days. The girl developed a depressive syndrome. She had been treated with individual psychotherapy for six months, during which the identification with a female therapist, and later with adoptive mother, was very important (Selzer, 1968). Silber describes three cases of pseudopregnancy in adolescent patients. Their psychosocial evaluation showed that it was a question of conversion reactions in primary deprived and depressive persons. They have been treated successfully psychotherapeutically (Silber & Abdala, 1983).

In five percent of the cases pseudopregnancy recidivates. There are records of recidivism every nine months during twenty years. There are also records of false pregnancy of unusually long duration; e.g. De Pauw describes mono-symptomatic delusion of hypochondriac type that lasted for 3000 days, i.e. almost ten years. It was treated successfully with pimozide (De Pauw, 1990).

PSEUDOPREGNANCY IN MEN

There are only a few cases of pseudopregnancy in men described in literature. In all of them it was mainly a question of psychotic disorders, most often it was paranoid schizophrenia, and neuroendocrinological abnormalities, misinterpreta-

tions of society, loss of associations, blockade and discontinuity of thoughts, isolation, with the confusion of sexual identity. Pseudopregnancy in men is also called malingered, false pregnancy, or delusion of pregnancy. They can even simulate childbirth. Pseudopregnancy in men is often in connection with couvade syndrome, i. e. during the wife's pregnancy. Neppe described the manifestation of delusion of pseudopregnancy in a man from the Xhosa tribe in South Africa, after he experienced a homosexual intercourse with the tribe's witch doctor.

Evans describes the case of the psychotic schizoaffective male treated with antidepressants and antipsychotics. The patient, in contrast to his wife, after their five-year-old daughter had died, yearned for a child to carry on his family name. He was diagnosed with psychosis and confirmed to have an abnormality of liver and pancreas, in the form of organomegalia, and ascites, and hormonally based increase of prolactin and normal level of LH, FSH and testosterone (Evans & Seely, 1984).

Another patient presented had no mental problems until his wife's pregnancy (the period from 4th to 7th month) and the cessation of sexual activities. Through psychodynamic reconstruction he was confirmed to have Oedipal level of personal development, and the existing reactive formation was related to introjection of submissive father, and it led to the development of a rigid superego. During the actualization of his fatherly role and maturing of his fatherly identification he regressed to the primary conflict zone, which was manifested through feelings of guilt and insufficiency in fatherly role, and consequently, in depression. The regression was not stopped, but progressed to triple identification: with his mother, mother of his child and with his child. By dependent relationship with his wife and intensive castration fear, a psychotic regression developed to a dyadic symbiosis. In therapy, with support and antipsychotics, it was necessary to reintegrate the ego, primarily through the projection of bad objects (mother and wife), and identification of good representations of his mother by keeping good representations of his wife, and a final identification with his role of future father who accepts his ambivalence toward parenthood. Hostility often occurs along with ambivalence. The pain they feel they in fact wish for their wives, making no distinction between wishes and reality. In this, sexual repression and sadism also take part. The important fact is that, in general, there are no sexual intercourses during late pregnancy, and so men pour their unrealized libidinal impulses into hatred toward women (Tényi, Trixler and Jádi, 1996).

PSEUDOPREGNANCY IN ANIMALS

Pseudocyesis has been described also in animals: in dogs, horses, pigs, primates, and has been experimentally induced in mice, rabbits and rats. The neuroendocrine etiological theories have been studied this way. There were cases of pseudopregnancy described in bitches that were deprived of their young and they accepted another with manifestation of the symptoms of pregnancy, lactation, amenorrhea and abdominal distension. Along with the signs of pregnancy there is also maternal behavior toward small animals (Gobello, Concannon and Verstegen, 2001; Millie's, 1998).

INDUCED DISORDER

According to de Montyel we differentiate three subgroups of induced disorders: *folie simultanée*, in which at the same time, simultaneously but independently the psychotic symptoms are manifested in two members of the family, who have been predisposed to a psychosis and have been living together; *folie communiquée*, in which two persons, with risk for development of psychosis, become psychotic, but every subject adopts one or more delusions from the other, and does not remit it after the separation; *folie imposée*, in which a psychotic subject imposes his symptoms onto primarily healthy individuals who then go through them. Milner described the manifestation of pseudopregnancy as a symptom in induced psychosis in daughter and subsequently in mother; neither of them previously showed signs of psychosis (Milner & Hayes, 1990).

Among specific presentations is a description of collective psychosis in every female member of an Aboriginal tribe who claimed to be kidnapped and made pregnant by aliens. All of them claimed to have given birth to invisible children (Chalker, 1996).

MECHANISMS FOR INCEPTION OF PSEUDOPREGNANCY

Although the disorder has a psychological basis, the process of development of pseudopregnancy is different in every patient. Some authors regard it as a psychosomatic disorder, others emphasize the importance of affective disorders and depression in the etiology, the third group consider it to be a variant of Munchausen syndrome or mono-symptomatic hypochondriasis. According to DSM IV it is a conversion disorder, under "Somatoform disorders".

Pseudopregnancy occurs in patients with determined organic cerebral or endocrinologic pathology, in patients with chronic mental disorders, but also in those who had no history of organic or mental disorders. Anyway, the psychic alterations are connected with the imbalance of the pituitary-ovarian function of neurotransmitters in the pituitary gland and/or hypothalamus (DSM-IV, 1994; MKB-10, 1999).

Pathophysiological model – organic causes

Numerous mechanical factors, which affect abdominal disturbances, can cause a woman to believe she is pregnant, for instance: retention of intestinal gasses, urine retention, abdominal neoplasia, tumor of uterus, ovarian tumor, hydatid mole, papillar renal carcinoma, inflammatory processes, and numerous causes of primary infertility (Rosenfeld, 1990). César describes pseudopregnancy in a female patient who was suffering from hepatomegaly, toxic hepatitis, alcohol induced disturbances of liver functions and consecutive ascites. In her anamnesis there was early separation from her mother, a series of symbiotic relationships, two successful pregnancies and a third that ended with premature childbirth, and alcoholism. The paracentesis, which was done in order to determine the etiology of ascites, she misunderstood for amniocentesis and asked for determination of her child's sex.

In alcoholic males, along with ascites, gynecomastia also occurs often, and feminization as a result of testicular atrophia and impotence, which can also take part in the development of the syndrome of pseudopregnancy.

The often-toxic effect of psychopharmacologic drugs leads to iatrogenically induced lactation, i.e. galactorrhea and amenorrhea, in persons treated with antipsychotics that can also cause pseudocyesis, especially if a person wants to have a child and starts to believe that she is pregnant (César, 1990).

Neuroendocrinological model

Pseudocyesis has a central hypothalamic – hypophysial background. It is a hypothalamic-hypophysial-ovarian dysfunction, and can be described as galactorrhea-amenorrhea-hyperprolactinemia syndrome (GAHS). It is important to emphasize that patients suffering from classic GAH-syndrome do not necessarily believe to be pregnant, while it is primarily in pseudopregnancy. GAHS means that there is abnormality in the hormone of growth, prolactin, ACTH, cortisol, similar to a depressive disorder. The neurotransmitter deficit of catecholamine and dopamine is responsible for hyperprolactinemia and gonadic dysfunction. Prolactin is a phylogenetic old pituitary hormone, which plays an essential role in the complex behavior during maternity. In pseudopregnancy his basal level rises. Such a change can also be found in hypothyroidism. The increased level of prolactin leads to lactation and enables the persistence of the corpus luteum that can also lead to amenorrhea, which hypothetically explains some symptoms of pseudopregnancy. The corpus luteum is a primary source of circulating progesterone during the estrous cycle, pregnancy and pseudopregnancy. Progesterone is a steroid of initiation

and maintaining pregnancy in mammals. From the pituitary gland and placenta Lutheotrophic factors are extracted. They include prolactin and LH during the first half of pregnancy, and estradiol and placental lactogenic hormone during the other half of the pregnancy. Gonadotropins, estrogen and progesterone manifest variations of level in the serum, which affects the luteal function. So, the depression of the cortical and limbic system causes a decreased level of biogenic amines, which results in an abnormal release of the luteinizing-hormone releasing factor (LRF), FSH releasing factor (FRF) and prolactin inhibiting factor (PIF) in medial eminence of the hypothalamus. It results in a decreased level of the luteinizing hormone (LH) and FSH, which leads to the suppression of ovulation and results in amenorrhea. It is interesting that the hormonal answer is normalized at the beginning of pseudocyesis (Tohei and oth., 2000).

Psychodynamic model

In psychotic pseudocyesis

Hypochondriac, somatic, haptical, kinesthetic and proprioceptive delusions are often found in major depression and schizophrenia. It is necessary to differentiate diagnostically the overestimated ideas from delusional mono-symptomatic psychosis, and the manifestation of hallucinations of pregnancy during psychotic exacerbations in schizophrenia (Feldman and oth. 1998). The differential diagnosis is important because it affects the therapeutic approach, i.e. the use of antipsychotics or antidepressants. The feeling of uterine contractions and fetal movements has been also noticed in manic and highly anxious conditions in persons who were not pregnant, and in a patient treated with antipsychotics after misdiagnosis of schizophrenia. Again the explanation can be found in an increased level of prolactin caused by stress and antipsychotics. However, we have to take into consideration the fact that the manifestation of pseudocyesis can also be the first manifestation of psychosis, and give particular attention to every manifestation of secondary amenorrhea in female patients. Allison describes the manifestation of pseudopregnancy in a female patient suffering from the syndrome of multiple personality, i.e. from dissociative identity disorder (Allison, 1990).

Some authors correlate delusion of pseudocyesis and de Clerambault syndrome, (also called erotomania), i. e. with delusions that the affected patient is loved by another person, through topic of loss and restitution. This way, both disorders, erotomania and pseudocyesis, in fact become a variant of mourning (Koic & Hotujac, 1998).

Pseudopregnancy is also a kind of self-punishing behavior. The patient avoids confrontation with reality, refuses to accept the fact that her pregnancy is an illusion, refuses medical, i.e. gynecological examination, does not want psychiatric help. Her symptoms are accompanied by avoidance, minimalization and somatization. There is ambivalence toward the existence of pregnancy, fear of realization, or secondary motives of often aggressive, hostile character. Unconsciously, the patient looks for anticipating disappointment in order to gratify these secondary motives (Vacek, 1980).

In nonpsychotic pseudocyesis

Pseudopregnancy also occurs in patients who were not previously diagnosed with psychopathology or personality disorder. They do not manifest fluctuations on a cognitive level, they are oriented, their memory is intact, and they think abstractly and function intellectually. Pseudopregnancy has been described as a complicated syndrome, which represents a form of conversion disorder accompanied by depression. Psychological characteristics of personality often present in pseudopregnancy are histrionic, borderline structure with the always-present conflictive feeling considering future pregnancy.

It occurs often, but not regularly, in lower educated persons. Patients are always women who want to have children, in other words, they have an intense wish to have a child, but they want to avoid pregnancy. The desire for a child and the fear from pregnancy occur at the same time. Psychodynamic reconstruction leads to immature female identity, which is responsible for the development of symbiotic objective relations. Infantile fantasies of pregnancy also lead to ambivalence, which is manifested through nausea and vomiting, similar to eating disorder. It is how Demaret describes the phenomenon of pseudopregnancy in female patients suffering from anorexia nervosa (Demaret, 1991).

Also described is the important role of separation conflict in patients who are extremely susceptible to separation, because the fixations are close to the phase of separation-individuation. Some authors emphasize the importance of penis envy, where the patient equates the penis with a child. We have a restitution of defenses, and pseudopregnancy becomes a sort of compensation for real or imaginary loss, a wish to be loved. In that case conversion disorder acts like a valuable defensive mechanism that keeps the inner conflicts in the unconscious. The patient is focused upon the physical symptom. Conversion reaction is a strong mechanism of defense, and when false pregnancy is revealed, complications can occur through serious depression, and result in a suicide

attempt. Thus the conversion reaction really is the equivalent of depression. Pseudopregnancy in the final phase of psychoanalysis was described by Breuer, in Anne O., Groeddeck in 1923 in his book "The Book of the It", and Briehl and Kulka in 1935, it was interpreted as a fantasy of oral pregnancy (Kaplan & Sadock, 1995). Abram also describes a transient pseudopregnancy in the final phase of the patient's psychoanalysis, during which she dreamed about the son she was going to have. He interpreted the phenomenon through the patient's positive transfer toward the therapist, separation anxiety because of the forthcoming end of treatment, and penis envy. Pseudopregnancy should have become the reason for continuation of treatment. The transfer analysis opened numerous unsolved separation and oedipal conflicts. Immediately after pseudopregnancy the patient really became pregnant. Thus the therapist served as a bridge, i. e. a transitional medium between the patient and her father, her mother and her husband (Abram, 1969).

Pseudopregnancy can be a defense and avoidance of confrontation with reality in cases of abuse in family. Another risk is also the existence of incest in the anamnesis, which makes an unsolved conflict causing the development of the disorder. Incest is one of the frequent forms of sexual abuse in childhood with polysemic physical, emotional, cognitive and interpersonal sequelae. A person usually does not have the energy for revealing the secret, i.e. for resolving the conflict. Pseudopregnancy is a metaphor of that trauma and a serious mechanism of defense. The inception of the disorder has been described this way when an incestuous father came out of prison. The authors are warning about the importance of paying attention to psychosomatic disturbances, abdominal or pelvic pain in children and suspecting incestuous behavior of close persons (Hendricks-Matthews & Hoy, 1993).

SOCIAL INFLUENCE

Longing for a child and having a baby is often conditioned by social pressure, influence of the surroundings, friends, partner, which can easily affect the thinking process in patients. The imperative of procreation still exists, although in somewhat smaller proportion considering the past, in accordance with the change of common stands and with a trend of forming small families. At present times there is broad education of masses and the possibility of determination and regulation of pregnancy. Nevertheless, there are still some customs conditioned by culture, like "lobola" in South Africa, which enables a husband's family to take back the bride's price they paid for a bride, in case she does not have a child for a specific period

of time. With this bride's price they pay for a new bride (Cohen, 1982).

There has been a case described of depressive women, who developed pseudopregnancy, and then also the signs of culture-bound syndrome, which is in Istria called "deboleza", and refers to emotional expression of family shame caused by imperilment of the accepted moral. It is manifested through negativism, hypobulia, obstruction of normal cognitive processes, withdrawal from social contacts, communication break with other people, over-tension, paranoid behavior, somatization, running away from the group they never return to, or only after restoration of their reputation and honor. Deboleza often ends in suicide (Pavlovic & Vucic, 1997).

Social factors also affect the hypothalamic-pituitary-ovarian function. There is a specific influence of depression, which lowers the synaptic value of biogenic amines and leads to hypothalamic suppression and decreased level of Gonadotropin-releasing factor (Gn-RH, LH-RH) and prolactin-inhibiting factor. This way the secretion of prolactin rises, and secretion of gonadotropin and FSH and LH decreases, which results in amenorrhea (Omer, 1986).

It is known that stress, anxiety and panic attacks can cause premature uterine contractions in women whose pregnancy is normal. Posttraumatic stress disorder (PTSD) is often followed by psychiatric comorbidity, which is related to predisposition. That is why along chronic PTSD we can see mood disorders, depression, mania, dysthymia, other anxiety disorders, obsessive-compulsive disorder, panic disorder, agitation, bizarre behavior, syndrome of dependencies on alcohol or other substances and personality disorders. In some cases we can find temporary, like "flashback" episodes, but also permanent psychotic disorders, which are sometimes close to paranoid disorder or schizophrenia, when, for example, chronic auditory hallucinations are present (Butler at al., 1996; Hamner, 1997). In the population of war veterans treated for PTSD in Croatia, the increasing scale of depression and paranoia and the F scale, which reflects confused thoughts and lack of comprehension on most MMPI inventories of personality, has been recorded. Disguised and suppressed aggression, destruction and discontent, turn against the body and the development of psychosomatic disorders is possible. The patient comes with his complex problems, combination of symptoms, and verbal and nonverbal aggression, overwhelmed with the intensity of emotional impulses. Wives of sick veterans are also subject to the development of numerous mental disorders whose source is depression and are often manifested through somatizations (Gruden at al., 1999; Figley at al., 1983).

THERAPEUTIC APPROACH

In treatment of pseudopregnancy purgatives, baths, massages, curettage, surgical procedures, leeches, emetics, tonics and opiates have been used in the past. In the 20th century the choice of treatment is psychotherapy: supportive, cognitive, behavioral, and analytic through exploration and clarification of unconscious feelings toward pregnancy. Early detection and empathic communication with the patient is most important. The exploration of present life situation, eventual new or old losses, and unfulfilled expectations has to be gentle. If possible, a "pseudo-father" or parents of a sick person have to be included into treatment. It is very important to say to a patient that his physical symptoms are serious and deserve attention. Confrontation with reality and a true diagnosis, together with supportive therapeutic approach, in most patients lead to the disappearance of the symptoms of false pregnancy, and in other patients the symptoms evanesce during a six-month period.

It is necessary to analyze chorionic gonadotropin (BCHG), thyroid gland hormones, to ultrasound and roentgenise the pelvis, to use a sonogram, which is usually used for listening to the heart of a baby and to present the results to the patient in order to convince her that pregnancy does not exist. We can also induce menses with parenteral application of testosterone or diethylstilbestrol. A combination of psychotherapy and uterine curettage or hormonal therapy is effective in almost every patient. Psychopharmacotherapy is also effective. Antidepressants are used most often, and also antipsychotics, in cases of the development of clinical pictures of psychosis.

Treatment should always be done in a team with the family doctor, gynecologist and social worker (Christodoulou, 1978). In family and marital therapeutic approach the strategy is based upon careful analysis of problems of the couple combined with family and sexual therapy and behavioral and cognitive techniques. Secondary techniques are – aggression control, communication training, desensitization and restraining wrong thoughts. It is most important to work on improving and rebuilding the partnership. It requires that the problem be well formulated from a careful and detailed evaluation of information from the anamnesis. Interactions among the couple are mostly negative, positive behavior is at a minimum. The existence of threatening violence is significant. Jealousy is often present, mixed with fear, anger, sorrow, and in its excessive form it can cause distress in a jealous person and in the victim (Murray, 1997).

FINAL CONSIDERATION AND NEW GOALS OF RESEARCH

The relation between the role of sex end mental disorders opens a new sphere in researching mental health: the psychiatry of women. It is a new concept with its clinical and epi-

demiological reality, which is confirmed with the existence of mental illnesses specific for women, like premenstrual syndrome, postpartum psychopathology, pseudopregnancy, disorders related to menopause, anorexia, bulimia… There are also peculiarities of psychological distress in women. Many mental disorders have in their expression large variations regarding the sex (prevalence, origin of disorder, symptomatology, prognosis and result of the treatment). According to this, there are new goals of research like, for instance, understanding the expression of hormones, genetic influences, consequences of social factors, sexual base of differences in prevalence of mental illnesses (depression, schizophrenia, anxiety, anorexia nervosa, personality disorders).

Modalities of treatment certainly depend on the effects of sex, and for prevention it is necessary to be also oriented toward interventions specific for a certain population.

Comorbidity is a frequent and very serious phenomenon in psychiatry. Psychotic and conversion expression can be manifested in numerous different shapes, which emphasizes the importance of early and correct diagnosis, upon which depends the efficacy of treatment and rehabilitation, in other words, prognosis of the illness and results of the treatment.

In treatment the presence of therapist and co-therapist is very important in order to prevent the manipulation of one therapist or making coalition with another.

Sociocultural and psychological factors influence the attitude that pregnancy and maternity have a central role in the development of the identity and every woman's self-respect. Essential is also membership in rigid cultural and religious groups, medical and psychological naiveness, social isolation, like for instance, immigration, change of residence and friends. The connection with depression and unresolved mourning often occurs.

In such a complicated case it is difficult to say if it is exclusively biologically based or a disorder developed from distress, which occurred under the influence of external, environmental factors. That is why it is very important to use the integral and systematic family approach in the treatment of every patient, taking into consideration the cognitive and social complexity of every individual, and also biomedical and psychotherapeutic approach. Such a way of thinking will prevent us from forgetting any member of the family, because any one of them could be the source of psychopathological occurrences in other members.

These suggestions are especially important in treatment of persons suffering form psychosomatic disorders, but also in the side-effect that developed during treatment with psychopharmacs. In other words, it is possible that iatrogenically

induced lactation, galactorrhea and amenorrhea together with the wish for a child and believing in pregnancy lead to pseudopregnancy.

It is necessary to emphasize the forensic meaning of the case, beginning from the accusation for infanticide to aggression due to pathological jealousy manifested by the patient's husband, his homicide threats, and her suicide attempts. The symptoms of pathological jealousy often persist for a long time and it can provoke reactive depression in a sick person. The existence of threatening violence is very significant. We have to pay attention also to an existing jealousy, which is often combined with feelings of fear, anger and sorrow. In its expressive form it can cause distress in a jealous person and in the victim. Sometimes that relationship ends with divorce. In some cases the violence is serious, and can end in murder which makes the forensic meaning significant. Sometimes it is necessary to suggest divorce to a couple, in order to decrease the risk of ominous violent acts. The personality of a paranoid jealous person, also an alcoholic, is marked with self-insecurity and complexes of inferiority toward the partner. The question of impotence is also very important.

In the treatment of complicated psychosomatic disorders it is necessary to emphasize the importance of systematic family approach to a patient, and the co-operation with other specialists, in this case with the gynecologist.

LITERATURE

Abram, H. S. (1969), Pseudocyesis followed by true pregnancy in the termination phase of an analysis, *Br J Med Psychol*, 42: 255

Allison, B. R. (1990), The multiple personality patient. Association for the anthropological Study of Consciousness. http://www.dissociation.com/indeks/unpublished/witch.txt

Butler, W. R., Mueser, T. K., Sprock, J., Braff, L. D. (1996), Positive Symptoms of Psychosis in Posttraumatic Stress Disorder, *Biol Psychiatry*, 39:839-844.

César, A. A. (1990), Pseudocyesis with concomitant medical illness. *Gen Hosp Psychiatry*, May, 12(3): 205-6.

Chalker, B. (1996), Project 1947 – Australian Aboriginal Culture and possible UFO connections. In: B. Chalker (ed.), *The OZ Files – the Australian UFO Story*. Sydney, B. Chalker.

Christodoulou, G. N. (1978), Pseudocyesis, *Acta Psychiatrica Belgica*, 78(2): 224-234.

Cohen, L. M. (1982), A current perspective of pseudocyesis, *Am J Psychiatry*, 139(9):1140-4

Demaret, A. (1991), From pseudopregnancy to anorexia nervosa, *Acta Psychiatr Belg*, 91(1):11-22.

De Pauw, W. K. (1990), Three thousand days of pregnancy. A case of monosymptomatic delusional pseudocyesis responding to pimozide, *Br J Psychiatry*, 157:924-8

Evans, D. L., Seely T. J. (1984), Pseudocyesis in the male, *J Nerv Ment Dis*, 172(1):37-40.

Feldman, D. M., Feldman, M. J., Smith, R. (1998), Delusions. In: *Stranger Than Fiction.When Our Minds Betray Us*, American Psychiatric Publishing Inc.

Figley, C. R, Hamilton, I., McCubbin, D. (1983), Stress and the family. New York, Brunner/Mazel.

Gobello, C., Concannon, P. W., Verstegen, J. (2001), Canine Pseudopregnancy: A Review. In: *Recent Advances in Small Animal Reproduction*, Ihaca: International Veterinary Information Service; A1215.0801. http://www.ivis.org/advances/Concannon/gobello/chapter_frm.asp?LA=1

Gruden, V., Gruden, Z., Gruden, V. Jr. (1999), Children and wives of deceased veterans-pride and suffering, *Coll Antropol*, 23(1):287-91.

Hamner, B. M. (1997), Psychotic features and combat-associated PTSD, *Depression and Anxiety*, 5:34-38.

Hendricks-Matthews, K. M., Hoy, M. D. (1993), Pseudocyesis in an Adolescent Incest Survivor, *J Fam Pract* 36:97-103.

Kaplan, H. I., Sadock, B. J. (1995), *Comprehensive Textbook of Psychiatry* VI, volume 1. Baltimore, Williams & Wilkins, 435-436.

Kaplan, H. I., Sadock, B. J. (1995), *Comprehensive Textbook of Psychiatry* VI, volume 1. Baltimore, Williams & Wilkins: 1255, 1702.

Koic, E., Hotujac, Lj. (1998), Delusional misidentification syndromes, *Lijec Vjesn*, 120:236-239.

Learning Network. (2001), *Interactive Encyclopedia* www.infoplease.com/ce6/sci/A0840377.html

Learning Network. (2001), *Interactive Encyclopedia* www.infoplease.com/ce6/society/A0813830.html

Medscape. (1997), *WWWebster Dictionary*. Merriam-Webster Inc.

Millie's Home Page. (1998), http://www.horcum.com/mills.html

Milner, G. L., Hayes, G. D. (1990), Pseudocyesis associated with folie 'a deux, *Br J Psychiatry*, 156:438-40

Murray, J. B. (1997), New trends in psychosomatic research, *Genet Psychol Monogr*, 96:3-74

Omer, E. O. (1986), Anxiety associated with both premature labor uterine contractions, *Journal of Psychosomatic Research*, 30(5):559-65.

Pavlovic, E., Vucic, M. (1997), Deboleza: culturally determined behaviour in Istria, *Psychopathology* 30(4):215-222.

Rosenfeld, I. (1990), A swollen belly: Cause for alarm?. *Cosmopolitan*, 208(3):154-157.

Selzer, J. G. (1968), Pseudocyesis in six-year-old girl, *J Am Acad Child Psychiatry*, str. 693-720

Silber, T. J., Abdala, W. (1983), Pseudocyesis in adolescent females. *J Adolesc Health Care*, 4(2): 109-12

Somatoform Disorder Not Otherwise Specified. (1994), In: *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV), (str. 468), Washington DC, American Psychiatric Association.

Svjetska zdravstvena organizacija. (1999), *Klasifikacija mentalnih poremećaja i ponašanja – Deseta revizija (MKB-10)*. Zagreb. Medicinska naklada.

Taber's Cyclopedic. (1997), *Medical Dictionary* Ed. 18, Philadelphia, F. A. Davis co.

Tényi, T., Trixler, M., Jádi, F. (1996), Psychotic couvade: 2 case reports, *Psychopathology*; 29(4): 252-4.

Tohei, A., Taya, K., Watanabe, G., Voogt, J. L. (2000), Hypothyroidism increases prolactin secretion and decreases the intromission threshold for induction of pseudopregnancy in adult female rats. *Physiol Behav*, 1-15: 69(4-5): 391-397.

Vacek, J. (1980), Pseudocyesis non psychotica et pseudocyesis psychotica, *Cesk Gynecol*, 45(9): 665-72

Whelan, C. I., Stewart, D. E. (1990), Pseudocyesis – a review and report of six cases, *Int J Psychiatry Med*, 20(1): 97-108

Woman's Diagnostic Cyber. (1998), Menstrual Problems. Stopped menstrual periods of infrequent menses. Secondary amenorrhea of oligomenorrhea – non pregnant. WDC.
www.wdxcybwr.com/mensprob.htm

Pseudotrudnoća i Couvade sindrom

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Pseudotrudnoća je stanje u kojem postoji čvrsta uvjerenost netrudne žene u vlastitu trudnoću. Poremećaj se javlja i u muškaraca. Bolesnici manifestiraju simptome i znakove trudnoće. DSM IV je svrstava u konverzivne poremećaje, unutar kategorije "somatoformni". Pseudotrudnoća se susreće u pacijenata s utvrđenom organskom cerebralnom ili endokrinološkom patologijom, u pacijenata s kroničnim duševnim bolestima, ali i u onih koji u povijesti bolesti nemaju organske niti psihičke poremećaje. Uvijek se istodobno susreću želja za trudnoćom i strah od trudnoće. U svakom slučaju, psihološke promjene uzrokovane su neravnotežom pituitarno-ovarijalne funkcije neurotransmitera u hipofizi i/ili hipotalamusu. Kombinacija psihoterapije, farmakoterapije antidepresivima ili antipsihoticima, hormonalne terapije i uterine kiretaže učinkovita je u gotovo svih pacijenata. Tretman bi trebalo uvijek provoditi u ekipi s drugim specijalistom (npr. ginekologom). Ističe se važnost sustavnoga obiteljskog pishoterapijskog pristupa u tretmanu psihotičnih pacijenata.

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PSEUDOCYESIS...

Pseudoschwangerschaft und Männerkindbett

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Die Pseudoschwangerschaft (Scheinschwangerschaft) wird definiert als ein Zustand, in dem eine nicht schwangere Frau fest davon überzeugt ist, schwanger zu sein. Dieses Phänomen kann auch bei Männern auftreten. Die erkrankten Personen zeigen alle Symptome und Anzeichen einer Schwangerschaft. Dieser Zustand wird nach offizieller Klassifizierung zu den konversiven Störungen innerhalb der Kategorie der "somatoformen" Erkrankungen gezählt. Pseudoschwangerschaften treten in Fällen auf, in denen das Bestehen eines organischen, zerebralen oder endokrinologischen pathologischen Zustands nachgewiesen werden konnte; ebenso bei Patienten mit chronischen seelischen Erkrankungen, aber auch bei Personen, die in der Vergangenheit keinerlei Beschwerden dieser Art hatten. In allen Fällen ist einerseits der Wunsch nach einer Schwangerschaft, andererseits aber auch die Angst davor anzutreffen. Die psychologischen Veränderungen gehen stets zurück auf Störungen der Neurotransmitter-Funktion in der Hypophyse und /oder dem Hypothalamus und infolgedessen auf Funktionsstörungen von Hypophyse und Eierstöcken. Eine kombinierte Behandlungsweise, bestehend aus Psychotherapie, Einsatz von Antidepressiva oder Antipsychotika, ferner Hormontherapie und Uterin-Curetage, hat sich bei fast allen Patienten als wirksam erwiesen. Die Behandlung müsste stets die Mitarbeit eines Spezialisten (Gynäkologen) mit einbeziehen. Die Verfasser betonen, dass in solchen Fällen die Teilnahme sämtlicher Familienmitglieder an einer psychotherapeutischen Behandlung äußerst wichtig ist.