

Sovata gynaecological treatment for female infertility

Sovata is renowned in Romania and surrounding countries for its treatment of infertility in women, performed with salt water and mud. In addition, the effective results attract more and more women to seek Sovata's gynaecological treatment for the purpose of infertility prevention (especially in cases of those who are at risk of infertility) and for preparing the uterus prior to vitro fertilization.

I. Therapy:

In Sovata we treat infertility caused by:

- fallopian tubes stenosis or blockage
- chronic pelvic inflammation
- adhesences (after pelvic surgery, peritonitis, inflammation)
- hypo function of ovaries (low estrogen and progesterone levels, ovulation disorders)
- hypo-plastic uterus
- endometriosis
- polycystic ovaries
- stress

Salt water and mud are extracted from the Heliothermal Ursu Lake and contain human-like estrogen and progesterone hormones liberated by Artemia salina, which improves significantly the hormonal status of the body. Human-like measured hormone levels are: in salt water estrogen human-like 95 S.U.% and progesteron human-like 0.7- 0.8 mg%, in mud estrogen human-like 355 S.U%o and progesterone human-like 2.5mg% (*"Natural curative factors of the main balneoclimateric resorts in Romania"*, Edit. Sport-Turism, Bucharest 1977- Stoicescu C-tin.- M.D., Munteanu Laviniu - M.D., pg. 162). On the other hand, the high amount of salt in water - 300g/l and in mud - 95% of mineral fraction of mud (*Fulop-Nagy J., Alexe M., Serban G.: "Salt lakes in Sovata", 2006*) relieves pelvic tissue fluids and stasis and decreases pelvic inflammation.

Sovata treatment is not recommended for the following cases:

- ovarian cysts greater than 3cm in diameter (ecography)
- uterus fibroma greater than 2cm (ecography)
- recent Bethesda/ Papanicolaou smears at risk
- genital surgery (or abdominal surgery) conducted within the last three months (cervix conization, ovarian cyst removal, laparoscopy)
- acute pelvic inflammation – anexitis, methroanexitis, etc (fever, need of antibiotics) more recent than three weeks
- malignant tumour anywhere in the body, treated within the last five years (ie: removal of the tumour, specific treatment and rigorous follow-up)

Discussion about possible infertility causes follows a detailed questionnaire and examination of a guest's previous medical documentation (if such documentation already exists, both for a woman and her partner) in order to screen other unexplored causes of infertility (as well as male infertility causes). We don't treat male infertility in Sovata, except in the case of psychogenic infertility caused by prolonged stress. Beyond that, the climate of Sovata has a good relaxing effect, and pregnancy among those with idiopathic (no cause found) infertility after treatment in Sovata probably correspond to a great number of stress-induced infertility cases.

Sovata's treatment consists of salt-water irrigation, intra-vaginal mud pads, external mud pack, electrotherapy, and salt-water baths. The required period of treatment is at least one week, with optimal effects following two–three weeks of treatment.

Pregnancy after gynaecological treatment in Sovata is achieved in 15% of cases, according to ten years of non-rigorous statistics:

- the total number of women included gynaecological problems besides infertility, like menstrual disorders, chronic pelvic inflammation, etc
- pregnancy cases registered were only those reported directly by mothers by phone – in other words, cases were not followed up individually. As a consequence, we think the real percentage of pregnancies achieved after treatment at Sovata is higher. (Pregnancy achieved by in-vitro fertilization (IVF) in rigorous statistics is about 15–25% in Romania.)

II. Prevention related to cases at risk of infertility:

- repeated anexitis, methroanexitis, other pelvic inflammations
- genital infections (especially repeated, chronic - Mycoplasma, Candida)
- hypo- and oligomenorrhoea

III. Preparing uterus for in-vitro fertilization

Both estrogen and progesterone levels are important for embryo implantation. Estrogen induces the development of progesterone receptors in uterus. The main role of progesterone is to prepare the uterus for implantation of the embryo, but progesterone has also an anti-abortive role, by modulating the mother's immune response. The loss of embryo after in-vitro fertilization (IVF) caused by the mother's insufficient levels of estrogen and progesterone could be avoided in some cases if the uterus is previously "prepared" for IVF using Sovata gynaecological treatment.

Conclusions:

Sapropelic mud and salt water, both taken from Ursu Lake, have a high content of salt and human-like estrogen and progesterone hormones (liberated by *Artemia salina* arthropode). The high temperature of the mud and salt water increases local circulation, implicitly the absorption of salt and hormones. Salt decreases local inflammation, heals genital lesions and dissolves adherences. Hormones, with almost the same chemical structure as the human ones, are received by ovaria, hipophysis and hypothalamus as their own, effectively stimulating and balancing the body's hormonal synthesis. Ovarian synthesis of estrogen and progesterone increases, regulating menstruations, optimising vaginal pH and ovulation and prepare the uterus for egg implantation.

In this way Sovata treatment prevents repeated miscarriages, including miscarriages after IVF, caused by inadequate preparation of the uterus (low endogenous estrogen and progesterone levels). Ovarian insufficiency with low estrogen levels decreases the number of progesterone receptors in uterus, so non-natural progesterone supplements (used in IVF protocols) are not able to mature uterus completely (there are not enough progesterone receptors in uterus). On the other hand, increased own progesterone levels after Sovata treatment (validated in clinical cases) also have an anti-miscarriage effect by modulating the mother's immunity and maturing the uterus.

The **climate of the Sovata resort** has a **relaxing effect** on the nervous system, neutralising chronic stress (there are direct connections by nervous fibres between brain and genital apparatus: the

brain stimulated by stress causes spasms of the tubes – blocking the ovule and fecundation, and also uterine contractions that eliminate the recently implanted egg). About 20% of cases of female infertility have unknown mechanisms: some of them are surely caused by chronic stress.

A simple treatment - Gynaecological treatment at Sovata using natural, scientifically recognized remedies can increase the number of pregnancies in well-documented cases of infertility (mentioned above), within the limits of contra-indications (also mentioned).

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