



Yoga therapy and gynecological conditions

by Artem Frolov

Our bodies are regulated by a myriad internal rhythms, some obvious, others hidden, depending on the time of day, season, mealtime, and the sleep schedule. The human body is a remarkably complex mechanism made up of countless clockwork gears, from large to miniscule, locked in constant interconnected movement, each gear affected by all others. Heartbeat and respiratory rate, fluctuations in gastric secretion and hormone production, mental energy and sexual activity – all these and many other rhythms must be perfectly attuned to each other to produce the state of balance we call health.

Women's bodies have one crucial biological rhythm that men do not possess: the menstrual cycle, which has an impact on many other processes. Conception and bleeding are not the only outcomes of monthly hormonal fluctuations. The menstrual cycle alters the person's nervous system, mental and emotional state, blood clotting and circulatory functions, excretion, and the body's overall ability to function. Therefore it's inconceivable to talk about a woman's health without a discussion of menstrual regularity and balanced sexual function.

Many gynecological conditions can be alleviated, at least partially, through simple Hatha yoga group practice. But to produce results quickly, yoga therapy must include several key elements, which can be adjusted depending on the pathology. To understand how yoga affects a woman's reproductive function, let's take a quick look at its main components.

The female reproductive system is controlled by three levels of endocrine regulation: the hypothalamus (the main control center), the pituitary gland (direct regulation mechanism), and the ovaries (peripheral endocrine glands). All three levels communicate back and forth with each other, handling mutual regulatory functions to form an orderly hypothalamic-pituitary-gonadal axis.

The hypothalamus is located in the midbrain and is connected to the posterior lobe of the pituitary gland by a slender stalk called the infundibulum. By processing signals from the body's internal and external environment, the hypothalamus regulates internal homeostasis. As the body's main control center that coordinates the functions of various systems, including the reproductive system, it is a key element in the person's overall health. The cells that make up the hypothalamus produce specific hormones, which travel to the pituitary gland via portal blood flow and regulate pituitary secretion. One hypothalamus hormone which regulates the body's sexual function is gonadoliberin, or gonadotropin-releasing hormone (GnRH). This hormone has direct effects on the neurons of the pituitary gland,

instructing it to produce two major hormonal factors that, in turn, have direct impact on the ovaries: the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH). These two substances are crucial for the ovaries to function correctly and to produce estrogen and progesterone, for ovarian follicles and eggs to mature, and for the menstrual cycle to maintain its regularity.

The hypothalamus produces gonadoliberein in cycles that follow a specific rhythm. Regular delivery of physiological quantities of gonadoliberein is enough to ensure normal secretion of FSH and LH. Any changes in the frequency of gonadoliberein production alter the amounts and ratio of these hormones in blood. By contrast, any change in the amount of gonadoliberein produced by the hypothalamus, even a tenfold increase in its concentration, results in only a minor increase in FSH and has no effect on LH.

Women go through one cycle of gonadoliberein production in 70-90 minutes. This frequency matches a number of biological rhythms: the sleep cycle, glomerular filtration rate and gastric secretion fluctuations, recurrence of hot flashes during menopause, etc.

We can assume that a breakdown of these biorhythms can disrupt the function of related systems and organs. For example, sleep and digestion problems may distort or block the menstrual cycle; fluctuations in production of female reproductive hormones may negatively impact the urinary tract; and so on.

Logic and certain practical experience also tell us that as a comprehensive mental and physiological rehabilitation tool, Hatha yoga improves interaction between various body systems and functions, optimizes the rhythmic work of our “clockwork gears”, and normalizes various biochemical and hormonal cycles by matching their rhythms to each other.

We can, with some stipulations, divide gynecological pathologies into the following groups:

1. Dysregulation conditions, related to disrupted interaction between various parts of the hypothalamic–pituitary–gonadal axis, exhibited primarily as changes in the menstrual cycle. This category includes functional disorders unrelated to any structural, organic reproductive pathologies (such as stress-induced amenorrhea) and endocrine regulation abnormalities rooted in organic changes (for example, structural pathology called pituitary adenoma).
2. Congestive vascular conditions, caused by diminished venous return in the small pelvis and female reproductive organs (uterus, Fallopian tubes, and ovaries). This includes varicose veins in the small pelvis and congestive conditions in general.
3. Infection and inflammation: inflammatory conditions triggered by various infectious agents, which can often be chronic.
4. Tumors, which can be benign (such as uterine fibroids) and malignant (oncological diseases of the reproductive organs).
5. Acute conditions which require emergency medical care (such as extrauterine pregnancy).

As a mental and physical rehabilitation tool, Hatha yoga can have positive effects on the first two groups of diseases (dysregulation and congestive pathologies).

However, we must remember that all groups of diseases can be closely interconnected, can occur together, and can trigger each other. For example, diminished blood drainage that causes varicose veins in the small pelvis and leads to changes in blood supply to the ovaries can also disrupt their endocrine function and cause dysregulation pathology.

A number of trials have examined the effects of yoga on the female reproductive system. Many of these were randomized controlled trials. Different sets of exercises can obviously produce different results. Unfortunately, most available publications make no mention of specifics,

such as whether the studies included so-called vacuum exercises (Nauli), or hip joint exercises; how much of the practice was dedicated to relaxation techniques; what difficulty level was used; etc.

The ability of Hatha yoga to affect the vegetative nervous system has been thoroughly investigated. A number of studies have registered improvements in the vegetative function of women with dysregulation pathologies:

Fifty women of reproductive age were randomly divided into the yoga group (25 women) and the control group (25 women). The yoga group, led by a qualified instructor, practiced yoga 6 days a week, 35-40 minutes per day, over three menstrual cycles. Each subject's height, weight, arterial pressure, and heart rate were measured before and after yoga. Their sympathetic and parasympathetic nervous system was evaluated using specific tests, and their irritability, anxiety, depression, and self-esteem levels were analyzed based on a set of questionnaires. At the start of the study, both groups showed significant sympathetic activity, along with irritability, anxiety, and depression in the premenstrual (luteal) phase compared to the post-menstrual (follicular) phase. When these parameters were measured in the middle and at the end of the study, the yoga group showed a significant decrease in weight, arterial pressure, and heart rate, reduced anxiety and irritability, and improved self-esteem in the luteal phase of their menstrual cycle compared to the control group. Significant changes on the depression scale were registered only during the follicular phase (Kanojia S. Et.al.,2013).

Another study demonstrated decreased sympathetic activity in women with PMS:

The study focused on 60 women in the 18-40 age group with a regular menstrual cycle (28-34 days) who suffer from PMS. Subjects were divided into three groups: group A (control group), group B (which focused on the Anuloma Viloma breathing technique), and group C (which practiced the asanas). Groups B and C practiced for 7 days before their expected menstruation. The study continued for 3 menstrual cycles. Researchers measured each subject's arterial pressure, heart rate, respiratory rate, galvanic skin response, and peripheral temperature. They discovered that basal sympathetic activity decreased and relaxation response improved in both yoga groups (groups B and C) compared to the control group (Sharma B. et. Al., 2013).

Numerous studies also demonstrated yoga's positive effects on the mental and emotional state of practitioners (including subjects suffering from severe somatic conditions, such as terminal chronic kidney disease and malignant oncology). Gynecological pathologies are no exception:

Women who suffer from menstrual disorders were randomly divided into the intervention group (average age: 27.7 years, n=65) and the control group (average age: 26.6 years, n=61). The intervention group practiced Yoga Nidra (a deep relaxation technique) every day for 6 months. Each subject's anxiety and depression were measured before and after the intervention using the Hamilton Anxiety Rating Scale (HAM-A) and Hamilton rating scale for depression (HAM-D). Researchers demonstrated a significant decrease in the HAM-A ($P<0.003$) and HAM-D ($P<0.02$) scores of subjects who initially had mild to medium anxiety and depression (Rani K. et.al., 2012).

In addition to improving the practitioner's emotional state, regular Yoga Nidra practice alleviates somatic symptoms in women with disorders of the menstrual cycle:

A randomized controlled trial involving women with disorders of the menstrual cycle and somatic disorders showed significant alleviation of pain ($P<0.006$), and gastrointestinal ($P<0.04$), cardiovascular ($P<0.02$), and genitourinary ($P<0.005$) improvements after 6 months of Nidra practice

in the intervention group (n=75) compared to the control group (n=75). Both groups also received medication (Rani K. et.al., 2011).

The authors also report that Yoga Nidra affects reproductive hormone levels:

150 women with menstrual cycle disorders were randomly assigned to the intervention group and the control group. The intervention group practiced Yoga Nidra (spontaneous muscle relaxation technique with elements of autogenic training). Subjects practiced 35-40 minutes per day 5 times a week for 6 months. Subjects in the intervention group showed a significant decrease in thyroid-stimulating hormone, follicle-stimulating hormone, luteinizing hormone, and prolactin levels compared to subjects in the control group (Rani K. et.al., 2010).

Although the authors give no indication of changes in the regularity and nature of the women's menstrual cycle, they conclude that regular Yoga Nidra practice can benefit patients with hormonal imbalances and disorders of the menstrual cycle.

Various works discussing yoga's effects on patients with dysmenorrhea note that subjects who practiced yoga for 30 minutes twice a week for 8 weeks showed a decrease in symptom severity measured using Menstrual Distress Questionnaires (MDQs) (Chien LW, 2012). One study is especially notable because it used specific Hatha yoga techniques (although not particularly focused on the reproductive function):

Young women 18-20 years of age suffering from dysmenorrhea were randomly assigned to the yoga group (50 subjects) and the control group (42 subjects). The study used the Visual Analog Scale for Pain to evaluate the intensity and duration of menstrual pain. The yoga group practiced specific yoga poses (cobra, cat, and fish) during the luteal phase of the menstrual cycle. The control group was not treated in any way and was only required to complete the questionnaire. After three months of the study, intensity and duration of pain decreased significantly compared to the initial level ($P < 0.05$). This improvement was much more pronounced in the yoga group compared to the control group ($P < 0.05$) (Rakhshae Z. Et. Al., 2011).

The advantages of using yoga during menopause have long been the focus of much discussion. Here, the main objective is obviously to get symptoms under control and to improve quality of life. Studies have shown that yoga practitioners saw more dramatic improvements in their perimenopause symptoms and quality of life than the control group (Nayak G. et. Al., 2014).

260 women of menopause age were randomly assigned to the yoga group and the control group (130 subjects in each group). The yoga group practiced with an instructor for 1.5 hours 5 days a week, then continued practicing at home for 35-40 minutes a day and twice a week with an instructor for additional 18 weeks. The yoga practice included the asanas, pranayama, and meditation techniques. Quality of life was measured after 6, 12, and 18 weeks using the QoL BREF scale. The study produced a statistically reliable improvement in all aspects of quality of life (physical, mental, and social) in the yoga group compared to the control group (Jayabharathi B et. Al., 2014).

While the positive effects of yoga on vegetative, mental, and emotional state are somewhat easy to predict, hormonal changes induced by yoga remain a very intriguing subject. This is especially true for endocrine gynecological disorders.

Ninety young women with polycystic ovary syndrome (PCOS) were randomly assigned to the yoga group (Y) and the regular exercise group (C). Both groups practiced for one hour every day for 12 weeks. Researchers measured each subject's anti-Müllerian hormone (AMH), FSH, LH, testos-

terone, prolactin levels, and the LH/FSH ratio, as well as analyzed BMI, hirsutism, and frequency of menstruation. By the end of the intervention period, AMH, LH, and LH/FSH had changed at significantly different rates in the two groups: AMH ($Y=-2.51$, $C=-0.49$, $p=0.006$), LH, LH/FSH (LH: $Y=-4.09$, $C=3.00$, $p=0.005$; LH/FSH: $Y=-1.17$, $C=0.49$, $p=0.015$), with the yoga group showing more pronounced improvements. In addition, the yoga group showed a more dramatic decrease in testosterone levels ($Y=-6.01$, $C=2.61$, $p=0.014$) and hirsutism ($Y=-1.14$, $C=+0.06$, $p=0.002$) measured using the modified mFG scale. Menstruation frequency increased more drastically in the yoga group. FSH and prolactin levels showed no significant changes.

In other words, yoga produces a more significant decrease in AMH, LH, and testosterone levels and more dramatic relief of hirsutism in subjects with PCOS practicing yoga compared to those practicing regular exercise. At the very least, this leads us to believe that yoga can be a useful addition to the treatment of endocrine disorders. Further studies will help determine the role and significance of yoga in treatment of these conditions.

As we can see, general yoga practice can have positive effects on the vegetative balance, mental and emotional state, and hormone levels of practitioners suffering from gynecological pathologies. Since these gynecological pathologies include a wide range of conditions, the effects of yoga on some diseases can be less pronounced than on others.

As we mentioned earlier, practitioners can expect yoga to produce the most dramatic effects on the following types of pathologies:

- dysregulation conditions (functional secondary amenorrhea, PMS, poly-, oligo-, and dysmenorrhea, other menstrual cycle disorders, and secondary functional infertility);
- congestive vascular conditions (small pelvic varicose veins and similar congestive diseases).

For patients with organic pathologies not related to blood flow disorders (such as endometriosis, endometrial polyps, cysts in the reproductive organs, etc.), yoga is more likely to have benefits as a supplement to other treatment. These patients must adjust their yoga practice to their specific condition, often by eliminating potentially dangerous techniques.

Use of particular techniques and exercises can increase the therapeutic efficacy of yoga. Let's examine specific types of yoga practice that help normalize women's sexual function.

Inversion asanas

Inversion exercises dramatically improve blood supply to the cerebral arteries. We can assume that improved cerebral blood flow stimulates the hypothalamic–pituitary system. Improved blood flow increases intracellular metabolism in the neurons, accelerates receptor regeneration, improves hormone response, and activates direct and reverse links along the hypothalamic–pituitary–gonadal axis.

These asanas have a reverse effect on the small pelvis by drawing venous blood away from the area. The small pelvis is particularly vulnerable to varicose disease in women due to the specific structure of their veins and the strong effects of hormones on their function. This disease, which often goes undetected, causes chronic pelvic pain, aggravates inflammatory conditions, and disrupts uterine and ovarian function. By regularly practicing inversion asanas, women can significantly relieve pressure on the pelvic veins. Inversion asanas can be even more effective when combined with twist poses (Parsva Sarvangasana, Parsva Halasana).

Descending perineum syndrome and pelvic organ prolapse can often lead to shifts in their normal position, causing the uterus and the bladder to push against each other. This pressure alters the arterial and venous topography of the pelvis, exacerbates congestive conditions, and disrupts blood flow. It's as if the prolapsed organs are "hanging" from the blood vessels, stretching them out and altering their aperture, firmness, and response to regulatory signals. Systematic practice of inversion asanas helps return the organs temporarily to their normal position, improving blood flow (at least while the practitioner holds the pose) and alleviating the negative effects on the function of prolapsed organs.

Abdominal exercises

Abdominal exercises (Agnisara Dhauti, Uddiyana Bandha, and Nauli) are used to massage the abdominal and small pelvic organs, stimulating their capillary blood flow and nerve endings.

Uddiyana Bandha and Madhyama Nauli (simultaneous contraction of both straight abdominal muscles and upward tightening of the abdominal wall and diaphragm) have a more direct effect on blood circulation in the small pelvic organs, as negative pressure in the chest and abdomen creates a sucking force that improves blood drainage from the small pelvis. To understand how these exercises can potentially draw congested venous blood away from the pelvic area, we simply need to remember that they are used to perform a yogic enema known as the Basti Kriya, a procedure that involves pumping water through a hose inserted into the anus.

The Uddiyana can be an excellent addition to inversion poses (Uddiyana Bandha combined with Viparitarakani Mudra). Performed together, each of these poses boosts the potency of the other.

Finally, by stimulating and regulating digestion, improving intestinal function, and eliminating constipation, the practice improves small pelvic venous drainage and blood circulation. This fully applies to all yoga techniques that stimulate the digestive system, including twist and inversion asanas, Mayurasana, Shatkarma exercises, and others.

Baddha Konasana and other techniques involving the hip joints

Proprioceptive sensibility is a concept used in physiology to describe the work of sensitive nerve endings that act as muscle, connective tissue, bone, and joint receptors and play a role in creating bodily sensations (such as a sense of posture). In other words, proprioception is a combination of senses registered by the person's locomotor system, muscles, and joints. But proprioception goes beyond helping us sense the spatial position of our body: it also plays an important part in the trophic mechanisms of internal organs. Too often, the pelvis and groin areas receive insufficient proprioceptive stimulation (with the latter frequently receiving no stimulation at all beyond contact between the buttocks and the car seat or couch). This has understandable effects on the functional state of internal organs located in these areas.

Stretching muscles and connective tissues and putting intense stress on proprioceptors helps tone the peripheral nervous system, increases metabolism in the nerve endings, and eliminates proprioception "starvation", thereby improving blood circulation in the small pelvis, fine-tuning the trophic mechanisms, and increasing nerve stimulation.

The Baddha Konasana in its various forms is not the only practice that improves the mechanisms described above: so do all Vyayamas and asanas that affect the perineum, hips, and their connective ligaments (the Padmasana, Gomukhasana, Virasana, Trikonasana, Ardha Chandrasana,

and others). These hip joint exercises are best when used to balance each other out: asanas that twist the hip away from and towards the body should be combined with those that rotate the hip internally and externally, and so on.

Ashwini Mudra and Mula Bandha

Perineal muscle strengthening techniques are an absolute requirement for women suffering from reproductive conditions for a number of reasons.

First, Ashwini Mudra and Mula Bandha poses produce effects similar to those of Baddha Konasana, with one distinction: in this case, the practice affects proprioceptive sensibility by conorting, rather than stretching the muscles in order to stimulate numerous nerve ending located in the muscle tissue.

In addition, by strengthening the perineal muscles, practitioners can keep the pelvic diaphragm and internal reproductive organs in their normal position, stop organs from pressing against each other, and alleviate chronic pelvic pain. By keeping arteries and veins in their normal position, these techniques also help improve local blood circulation.

As they move, the perineal muscles massage the small pelvic organs and surrounding tissue, activating their capillary blood flow, which in turn regulates the work of reproductive organs.

Techniques that specifically target the perineal muscles may also be useful in normalizing the genitourinary function, since their effects on particular reflex points are more precise. One such reflex point, located halfway between the anus and the genitals (the vagina in women, the scrotum in men) and known in traditional Chinese medicine as Hui Yin, is believed to be the place where all Yin channels meet, and is used to treat various genitourinary disorders. In Bihar yoga, this spot is also called the Mula Bandha point. The Bihar School instructs its students to practice contracting the Mula Bandha point without moving any other pelvic muscles. While holding the Supta Baddha Konasana pose, practitioners place their right index finger on the Mula Bandha point and the left index finger on the anus, then practice contracting each of these zones separately. At first, students practice this technique using their sense of touch. As they grow more skillful at controlling their pelvic muscles, they move on to doing the exercise without using their hands. Next, students learn to contract three or more isolated points on the pelvic diaphragm.

The Mula Bandha version that involves all pelvic muscles helps improve blood circulation in the small pelvic organs and keep them in their normal position. The version that involves contraction of individual parts of the pelvis affects various reflex points that regulate the genitourinary function.

Breathing exercises

Unless specified otherwise, all types of yoga practice rely on nasal breathing. Once again, everything we know about physiology confirms the astounding precision of yogic sadhana, honed over millennia of practice.

The importance of nasal breathing lies in the link between the mucous membrane of the nose and the central nervous system. The brain consists of a complex system of cavities (cerebral ventricles), connected with each other and with the cerebrospinal system by a network of channels. These cavities are filled with the spinal fluid: a crucial biological mix of a multitude of active substances that affect the central nervous system. Moreover, composition of the spinal fluid has

cardinal effects on the entire body. For example, its acidity and CO₂ content are key parameters that regulate respiratory function.

The pharyngonasal mucous membrane also communicates with the nervous system using a reflex. Rhythmic exhalation of air from the nasal passages causes intracranial pressure to fluctuate. This fluctuation is the driving force behind secretion and circulation of the spinal fluid.

Conditions which disrupt proprioceptive stimulation of the central nervous system, combined with difficulty breathing through the nose, have long been considered especially dangerous in childhood, when they can lead to delayed mental and physical development.

Partial or full nasal blockage leads to increased intracranial pressure, cerebrovascular changes, headaches, and mental retardation. These changes disrupt hypothalamic–pituitary function, which in turn fails to adequately regulate the menstrual cycle.

For these reasons, nasal breathing is the foundation of normal central nervous system function, and is absolutely necessary for regulating the hypothalamic–pituitary axis. Women with menstrual cycle disorders can benefit from mastering techniques designed to keep the nasal passages in good working order (Jala and Sutra Neti, Kapalhati, and Bhastrika) and adding them to their regular practice.

All Pranayamas affect the reflexes described above. The easiest of these is the Nadi Shodhana technique, which levels out the central nervous system’s stimulating and inhibiting functions. We can assume that it also regulates the complex processes involved in neurometabolism, spinal fluid circulation, and hypothalamic–pituitary function.

In addition, when talking about yoga as treatment for gynecological conditions, we must mention breathing techniques which improve blood drainage from the small pelvis. One of the central venous drainage mechanisms is suction created inside the chest on inhalation. This process relieves pressure on the major veins (superior and inferior venae cavae, which flow into the right atrium of the heart) and drives venous blood from the pelvis and lower extremities, lowering blood pressure. Congestive problems (varicose veins in the small pelvis, chronic inflammatory processes) can be improved by breathing techniques that stimulate venous drainage. These exercises involve holding one’s breath on inhale for short periods of time. Practitioners hold the Kumbhaka using isometric contraction of the intercostal respiratory muscles, while keeping the glottis relaxed. The Ujjayi technique on inhale also improves venous blood circulation.

Remember: hypoventilation Pranayamas take time to master and must be practiced under the guidance of an experienced instructor. These exercises also have hypercapnic (related to increased carbonic acid content in blood) and hypoxic (related to decreased blood oxygen content) effects. Periods of hypercapnia and hypoxia train the body in increments, improve the ability of the intracellular respiration mechanisms to adapt, stimulate cellular metabolism throughout all organs and systems, and help clear small arterioles and capillaries, including those located in the hypothalamic–pituitary–gonadal axis.

Relaxation

Constant emotional stress and chronic stress are two of the most common causes of menstrual disorders. The hypothalamus is susceptible to signals from “below” (the pituitary gland and the ovaries), as well as from “above” (the cerebral cortex, which determines the person’s mental and emotional state and higher nervous activity). Long-standing foci of negative stimulation in

the cerebral cortex disrupt normal subcortical function, confusing its signals and throwing its balance into disarray.

Thanks to its ability to regulate the musculoskeletal system, regular Shavasana and Yoga Nidra practice helps normalize the practitioner's central nervous system function and mental and emotional state, eliminates pathological foci of congestion, and stops the cortex from having too much impact on the hypothalamic-pituitary-gonadal axis.

Overall effects of physical exertion

Physical exertion in general undoubtedly has positive effects on the menstrual cycle and on the woman's overall health. For example, we have seen definitive proof that regular physical exercise alleviates PMS symptoms. By increasing the number of functional capillaries, expanding the overall bloodstream, and improving blood flow, physical exertion helps normalize every function of the body.

However, for best results, women need to select an optimal exertion level that best matches their condition. Yoga is no exception in this regard.

A normal menstrual cycle necessary for a fertile reproductive system requires a minimal threshold amount of fatty tissue in the woman's body, since this tissue participates in regulating the sexual function.

Estrogen is synthesized in the ovaries, adrenal glands, and fatty tissue, with the latter producing approximately one-third of all circulating estrogen. Therefore, women whose body fat drops below normal levels can suffer from hypoestrogenia and amenorrhea. In some cases, overly intensive yoga practice can stop menstruation completely. But fine-tuning the exercise algorithm to focus on relaxation and trophotropic processes usually restores the menstrual cycle.

In women with obesity, by contrast, excessive amounts of fatty tissue lead to overproduction of estrogen, which in turn disrupts the ovulation process. Women with alimentary obesity (related to nutrition and constitution) are 6 times more likely to develop menstrual disorders and almost 2 times more likely to be infertile. However, to restore the normal menstruation cycle, it is often enough to lower body mass by 10-15%. Women with these conditions should be prescribed a more intensive practice regimen designed to lower body mass, which includes daily stimulating "warm-up" exercises: Agnisara Dhauti Kriya, Surya Namaskar, and others.

Although the therapeutic yoga algorithm must include all the elements discussed above, individual techniques should be highlighted based on the specific diagnosis. For example, menstrual cycle disorders triggered by regular emotional strain call for deep relaxation and Nadi Shodhana techniques. Small pelvic varicose conditions (especially in women with sedentary jobs) demand various forms of inversion asanas combined with Uddiyana Bandha and breathing techniques which stimulate venous blood flow to the heart. Yoga used to treat functional amenorrhea must include regular Baddha Konasana exercises in all their varieties, along with Gomukhasana and other asanas that affect the sensory nerves of the pelvis and groin areas. Different pathologies require different exercises. However, the best results demand a comprehensive approach that includes all types of practice described above.

I would like to reiterate that to compare the effects of various yoga techniques, or to compare the effects of general yoga practice to those of more specific poses (selective abdominal exercises, exercises focused on the hips and muscles, etc.), we must examine the results of randomized controlled trials.

It's no accident that duration of a woman's menstrual cycle matches the cycles of the moon. I have seen numerous cases in which a well-balanced yoga practice goes beyond regulating duration of the menstrual cycle to actually bind menstruation to the lunar cycle: over time, the practitioner's menstruation will fall on the new moon, while ovulation (production of a viable egg ready to be fertilized) will coincide with the full moon, the astronomic culmination of the lunar cycle. The metaphysical beauty of this phenomenon aside, it evidently has perfectly explainable physiological causes. It's possible that interplay between the Earth's electromagnetic field and the Moon and its effects on the body retune the woman's biological pendulum, which initially follows its own individual pace, to work in perfect harmony with Nature's own rhythms.

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