

Secondary Amenorrhea - Western and TCM perspective

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Amenorrhea is the absence of menstruation, and is a normal feature before puberty, during pregnancy and lactation, and in postmenopausal females. Amenorrhea can be caused by any number of changes in the organs, glands, and hormones involved in menstruation. Stress due to internal or situational concerns can cause secondary amenorrhea, because stress interferes with the brain's control (through hormones) of the ovaries. Amenorrhea may be classified as either primary or secondary amenorrhea. Primary amenorrhea is defined as the failure of menses to occur by age 16 years, and is usually a life-long condition. Secondary amenorrhea is a condition in where there is an absence of menses for 3 months in a woman who was previously regular and for 9 months in a woman who was not regular (irregular skipped periods). The problem of secondary amenorrhea is what will be the focus of this paper.

Western Medicine Pathological Causes for Secondary Amenorrhea

Thyroid function

Both hypothyroidism and hyperprolactinemia can cause secondary amenorrhea, due to abnormal TSH levels. Thyroid disorders can also cause an increase or decrease in the production of prolactin — a reproductive hormone generated by the pituitary gland. An altered prolactin level can affect the hypothalamus and disrupt the menstrual cycle.

Treatment is the use of thyroid supplementation.

Pituitary tumor

A noncancerous (benign) tumor in the pituitary gland (adenoma or prolactinoma) can cause an overproduction of prolactin. Excess prolactin can interfere with the regulation of menstruation. This type of tumor is treatable with medication, but it sometimes requires surgery.

Hormonal imbalance

A common cause of amenorrhea or irregular periods is polycystic ovary syndrome (PCOS). This condition causes relatively high and sustained levels of estrogen and androgen, a male hormone, rather than the fluctuating levels seen in the normal menstrual cycle. This results in a decrease in the pituitary hormones that lead to ovulation and menstruation. PCOS is associated with obesity; amenorrhea or abnormal, often heavy uterine bleeding; acne and sometimes excess facial hair. Diagnosis and treatment include inducing withdrawal bleed by the use of progesterone.

Uterine scarring

Asherman's syndrome, a condition in which scar tissue builds up in the lining of the uterus, can sometimes occur after uterine procedures, such as a dilation and curettage (D and C), Caesarean section or treatment for uterine fibroids. Uterine scarring prevents the normal buildup and shedding of the uterine lining, which can result in very light menstrual bleeding or no periods at all.

Premature menopause

Menopause usually occurs between ages 45 and 55, but if it occurs before age 40, it's considered premature. The lack of ovarian function associated with menopause decreases the amount of circulating estrogen in the body, which in turn thins the uterine lining (endometrium) and brings an end to menstrual periods. Premature menopause may result from genetic factors or autoimmune disease, but often no cause can be found.

Other causes for secondary amenorrhea can include anorexia nervosa, excessive exercise, depression, psychological stress, marijuana use, Crohn disease, cystic fibrosis, sickle cell disease, thalassemia major, HIV infection, renal disease, diabetes mellitus, and antidepressants. Western medical treatment is dependant on the conditions of the patient and defined by the etiology of the menstrual cycle disturbance. Many of the conditions that cause secondary amenorrhea will respond to treatment. 'Athletic' and drug-induced amenorrhea has no effect on long term fertility as long as menstruation can recommence. The best way to treat 'athletic' amenorrhea is to decrease the amount and intensity of exercise. Similarly, to treat drug-induced amenorrhea, stopping the medication on the advice of a doctor is a usual course of action.

TCM Perspective for Secondary Amenorrhea

Chinese medicine is meticulous in assessing the absence of menstruation, which is known as “bi jing”, meaning menstruation is closed or shut. Similar to the western

perspective, it is always important to first establish that the lack of menstruation is not due to pregnancy, otherwise treatment could interfere with the ongoing pregnancy.

Even though traditional Chinese medicine maintains that the loss of blood through menstruation entails a loss of vitality, amenorrhea is nonetheless deemed pathological in reproductive women, and is diagnosed as either the blockage or drying up of menstrual blood. While the exhaustion of menstrual blood is believed to indicate a generally weakened physical condition, a blockage is deemed as a very serious condition. Chinese medicine considers regular menstruation as a prerequisite for both physical and mental health in women, because like qi, blood must flow freely. Since both are seen as the forces sustaining life, blockage of either is thought of as a deathly pathological condition, in that it can develop into a fatal sickness. Therefore careful differentiation should be made to distinguish lack of menstruation due to deficiency of post-natal qi from an excess condition where qi & blood, or phlegm and cold are stagnating.

Etiologies for Missed Menstruation

Liver and Kidney Deficiency

This involves a deficiency of Kidney Essence, the origin of menstrual blood, and Liver's ability to store Blood. This can be caused by hereditary weakness, and having too many children close together. Overwork and a prolonged illness can also lead to a deficiency of Liver and Kidney Yin, where the yin and blood dry up, which lead to

inability of the Ren and Chong to be filled. Deficiency of Kidney Essence can also lead to Kidney Yang deficiency, which can lead to Cold obstruction of the uterus.

Symptoms: Lack of menarche or gradual amenorrhea, dizziness, tinnitus, aching sensation in the groin, dry mouth, 5-sole heat, tidal fever and sweating, dark complexion, malar flush, pale-red tongue with scanty coating, and a thin and taut pulse.

Qi and Blood Deficiency

When the Spleen and Stomach are weak, they fail to make qi and blood. Poor diet, overwork, and overthinking are the main culprits, as well as repeated miscarriages, breast feeding for too long, and protracted illness. This is magnified by a deficiency of Heart and Liver blood, both which are involved in the making of menstrual blood.

Symptoms: secondary amenorrhea where the menstruation was originally scanty and light in color, sallow complexion, lusterless hair, loss of hair, dizziness, blurred vision, palpitations, shortness of breath, lethargy, lack of appetite, loose stools, pale lips, thin and pale tongue, and a thin and weak pulse.

Yin Deficiency and Blood Dryness

Longterm Liver and Kidney yin deficiency can create deficiency heat that eventually can dry up yin & menstrual blood. This is often due to constitutional deficiency combined with overwork & inadequate rest, or chronic disease. The progression of disease can turn into a fire evil condition as well.

Symptoms: secondary amenorrhea where the menses was originally scanty, possible early, with fatigue and blurry vision, 5 sle heat, malar flush, feverishness, dry skin, lower

back ache, dry stools with scanty & yellow urination, a dusky red tongue with a dry coat, and a thin or empty and rapid pulse.

Qi and Blood Stagnation

Emotional stress is the main factor for this pathology, such as anger, frustration, anxiety, and sadness - all of which lead to stagnation of Liver Qi. Longterm stagnation can lead to Blood Stasis, which then obstructs the Ren, Chong, and uterus.

Menstruation is then blocked.

Symptoms: amenorrhea, mental depression, irritability, easy to anger, distention and fullness in the chest and hypochondria, pain that dislikes pressure in the lower abdomen, purplish tongue that can have reddish sides or purples spots, and a wiry or deep and choppy pulse.

Damp-Phlegm Obstruction of the Uterus

Spleen deficiency can lead to Dampness. Over time, this can become Damp-Phlegm, obstructing the lower burner and uterus, preventing the flow of menstruation. This is usually caused by excessive consumption of cold and raw foods, dairy, or foods that are greasy.

Symptoms: amenorrhea, obesity, whitish complexion, fullness and oppression in the chest or hypochondria, lethargy, leukorrhagia, swollen tongue with sticky white or yellow coat, and a slippery pulse.

Case Study

MEJO, female, 28 years old, African-American, women's spa owner

First visit was on November 19, 2008

Chief complaint: secondary amenorrhea for 4 months

Current medical history: menstrual cycle was previously regular since menarche, although with scanty bleeding that was purplish-red in color, sometimes with clots. Her menstruation stopped completely 4 months ago around the time of her divorce. She does not even get any spotting, but she does experience premenstrual symptoms, which include change in mood, loose stools, and breast distention. Since her divorce, she has been highly emotional, and has constant feelings of anger and resentment. She recently had stabbing right upper quadrant pain that was thought to be acute pancreatitis after receiving blood tests that showed she had elevated levels of pancreatic enzymes. An ultrasound was done to also look for evidence of gallstones, as the pain often returns, but not as acutely.

Current Symptoms: dizziness, dry mouth, thirst with a desire for liquids, stress with vexation & agitation, heavy sweating at night, sharp headaches, poor sleep with copious dreaming, and rib-side pain, distention and fullness that shifts from the right upper quadrant to the left upper quadrant. She has a poor appetite, feels pain and bloating after eating, and her stools are very soft and she feels like her defecation is incomplete. Although she often feels hot, especially in the head, her toes and fingers subjectively

feel cold. She is very animated and speaks very loudly and rapidly, is almost hyper, but says she feels exhausted.

Physical findings: palpation showed tightness along the lateral neck and upper back. Abdominal palpation showed distention along the ribsides and above the navel, with coolness right above and below the navel. The leg Yang Ming and Shao Yang channels were both tight.

Tongue: teethmarks, reddish purple along the sides, red tip, slightly yellow coating. She has sublingual distention on the underside of the tongue.

Pulse: wiry, thin, and slightly rapid - left guan and chi especially weak at mid-depth. The right guan is slippery.

This case presented in the Japanese clinic at SIOM, therefore Japanese channel meridian theory was applied to diagnose and determine treatment. For purposes of this paper, I would like to instead take a theoretical approach to determine diagnosis and treatment using Traditional Chinese Medicine.

I believe this case belongs to Liver fire rushing upwards and causing counterflow blood, which then blocks menstruation, all of which stems from her extreme emotional instability due to her recent divorce. The patient has a constitutional Liver and Kidney yin and blood depletion, which allows the Liver yang to rise excessively. Combine this with the Liver qi stagnation that results from emotional constraint, and blood stasis is created, which leads to heat accumulation. As the Liver qi and fire ascend counterflow,

the stagnated menstrual blood follows the heat upwards. The blazing Liver fire and blocked menstruation is why you see the symptoms of amenorrhea, dizziness, abdominal pain, vexation, irritability and anger. The Liver qi constraint is why you see the epigastric and ribside distention, fullness, and pain. As the Liver yang vents outward, you see agitation & night sweating. Finally, Liver qi attacking a weak Spleen and Stomach leads to the digestive weakness and fatigue.

Diagnosis: missed periods due to Liver Fire rushing upward, causing static menstrual blood to counterflow

Treatment:

Drain the fire, smooth the Liver, descend counterflow, regulate menstruation

Nourish the Kidney and Liver Yin, regulate blood

Point selection: focus on clearing the flaming Liver Fire

LR 2 Xing Jian, PC 7 Da Ling - transform stagnation to clear rising Liver fire and deficiency heat

ST 44 Nei Ting - clear ST heat, aid digestion

SP 6 San Yin Jiao - tonify the Spleen, harmonize the Liver, regulate qi and blood

Ren 4 Guan Yuan - regulate menstruation

DU 20 Bai Hui - reduce and release rising yang qi

Formula: modified Dang Gui Long Hui Wan & Xue Fu Zhu Yu Tang

lu hui 6g, long dan cao 6g, huang bai 8, dang gui 6, xiang fu 9g, sheng di 12, niu xi 9g,
yi mu cao 9g, shi hu 12g, mai dong 9g, qu mai 12g, long gu 6

Use Xiao Ying Jiang to consolidate results to continue to tonify Liver and Kidney yin.

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