

A OBSERVATIONAL STUDY OF NUTRITIONAL DEFICIENCY TO CAUSE DYSMENORRHOEA IN YOUNG GIRLS

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ABSTRACT

A women's menstrual cycle is often linked to her emotional well being. Dysmenorrhoea is defined as cyclic lower abdomen or pelvic pain during menstruation. In this observational study we noted that maximum girls have complaint of excessive pain during menses (Dysmenorrhoea) After taken their history maximum were taking lack of essential vitamins and mineral diet and also complaining eye sight weak and having stress of study and holding of natural urgs. Due to today's stressful life & lack of exercise altered in Hypothalamo-Pituitary Ovarian (HPO) axis which leads to menstrual dysfunction. In *Ayurvedic* concept due to *Apathya Ahar (Vata Prakopaka)* as fast food and diet used lack of micronutrients and *Vihara* like holding of urine and stool urge and avoiding of *Rajaswala-Charya* vitiation of *Apana*

Vata which can altered *Ritu Chakra*. Our *Acharya* has clearly mentioned *Lakshana of Kastartava* in "*Udavarta Yonivyapada*" these disorders do not occur without vitiation of *Vata*, thus first of all *Vata* should be normalized. So *Vata Shamak* drug like *Hingu* (*Asa foetida*), *Garlic* (*Alium sativum*), *Shatpushpa* (*Anethum sowa*), *Zinger* vitamin and mineral rich (specially Vit A, E and Mg) should be take, Do proper Yoga and exercise avoid sedentary life style and fast food helps to cure dysmenorrhoea.

KEYWORDS: Dysmenorrhoea, Vitamins, Minerals, *Udavarta Yoni*.

INTRODUCTION

Primary dysmenorrhea is widely prevalent in more than 70% of teenagers and 30 -50% of menstruating women.^[1] The cause is genetically defect in sub-endometrial-myometrial

junctional zone or imbalance in the autonomic nervous control of uterine muscle, more common causes are sedentary life style and lack of nutrient in diet and stress.^[2] In rural area people are unaware about balance diet so the diet take by them are lack of nutrient and in school girls due *Vegadharan* (hold of urine and stool urge) and improper follow of *Rajaswala Charya* (menstrual regimen), eating of fast food and stress these all are prime cause which leads to vitiation of *Apana Vata* and disturbed in their function leads to improper uterine muscle spasm leads excessive secretion of prostaglandin and inflammatory mediators causes pain.

Among *Yonirogas*, *Udavarta Yonivyapad* is a condition characterized by painful menstruation and the relief of discomfort following blood discharge,^[3] which is typical of primary dysmenorrhoea. In general, micronutrients include necessary vitamins and minerals. They are essential for preserving physiological function of the body; deficiency of micronutrients can have a wide range of negative effects on human health. Research indicates that women of reproductive age are particularly prone to deficiencies in iron, folate, vitamin D, and zinc, as the reproductive role of women demands increased intake of these micronutrients. Poor diet and lifestyle can significantly influence the menstrual cycle and hormonal changes in women, further affecting their micronutrient requirements. Reluctance of young girls and ladies to adopt the hormone therapies bring them to Ayurvedic treatment or any other alternative treatment of their choice. Ayurvedic management aims at *Vatanulomana* through *Snehana*, *Swedana*, *Vasti* along with *Samana Aushadha* which can alleviate *Vata* and life style modification by *Yoga* and diet helps to cure this condition.

MATERIALS AND METHODS

In this study observation done on 200 girls through camp organize in Matushree Public school, Sulakhedi, Indore by Department of Prasuti Tantra and Stree Roga of R.N. Kapoor Memorial Ayurvedic College & Hospital, Indore. After taken menstrual history, maximum girls had complaint of dysmenorrhoea, Premenstrual syndrome (PMS) and eye sight weak and on history of dietary habit had lack of nutrition (lack of iron and vitamin A & D). On history of daily routine they had lack or exercise, long time holding of urine and stool urge, and had stress of study, they also did not follow *Rajaswala Charya* (menstrual regimen). We counsel all girls to take healthy lifestyle through Ayurvedic regimen and Yoga. Also advise to take proper balance diet.

DISCUSSION

On our observation maximum girls have dysmenorrhea with difficulty seeing distance objects and headache, so there is definitely deficiency of vitamin A and other micronutrients. Department of Obstetrics and Gynecology, University of Texas Medical Branch, Galveston, have done the study of Vitamin A level in PMS. In this study observe that low level vitamin A leads to PMS and after treatment of Vitamin A on PMS women's find reduce this symptoms. In Vitamin A was thought to alleviate PMS by opposing thyroid hyperfunction, or by exerting a direct antiestrogenic, or diuretic effect. So its clear vitamin A deficiency leads to dysmenorrhoea.^[4]

In rural area maximum people unaware of benefits of balance diet. On history of dietary they didn't take milk so maybe there is deficiency of calcium and vitamin D. In some study observed that Vitamin D (Vit D) plays a significant role in the female reproductive system, as its receptors are found in ovarian and endometrial tissue. Interestingly, there is a reported association between Vit D deficiency and severe to very severe dysmenorrhea. This correlation may be attributed to Vit D's anti-inflammatory properties, which involve the regulation of prostaglandin levels. To delve deeper, the biologically active form of Vit D inhibits the expression of cyclooxygenase 2, thereby reducing prostaglandin production in the endometrium and consequently affecting calcium homeostasis.^[5]

Also maximum girls have complaint of stress of study so this suggest they have deficiency of Vitamin E because vitamin E is anti-stress factor. Taking of Vitamin E can help reduce cramping, anxiety and cravings symptoms that are associated with PMS. It can also alleviate the pain, reduce menstrual blood loss by balancing the hormones and regulate the menstrual cycle.^[6]

They have definitely deficiency of Magnesium because it is a superhero for PMS symptoms, particularly period pain. Taken daily, magnesium may prevent dysmenorrhea (menstrual cramps). It works by relaxing the smooth muscle of the uterus and by reducing the prostaglandins that cause period pain.^[7]

Drug that can be used are *Dashmoola*, *Kumari*, *Hingu*, *Sendhav Lawan*, garlic, ginger, *Shatpushpa*, *Krishna Jiraka*, *Krishna tila*, *Chaturbeeja* etc., maximum drug have *Ushna Virya* and *Vata Shamaka* property.

Pathya Ahara (Diet) includes Eat healthy warm and fresh food, brown rice(contains vit.B₆ which may reduce bloating), green leafy vegetables, pumpkin seeds etc., eat healthy fruits like apple, dark grapes, pineapples, carrot etc. following *Pathya Vihara* (life style changes) should be adopted -Proper follow of *Ritucharya*, avoid waking up late night, adequate sleep at least 6-8 hours, exercise regularly.

CONCLUSION

Dysmenorrhoea drastically affect women's daily activity. In *Ahara* (diet) consume more refined sugar, refined, carbohydrates, and oily and fatty products, and less vitamins, such as vitamin A, D, E Calcium and Meganicium and in *Vihara* (activity) lack of excercise, long time holding of natural urges and stress are the main cause of dysmenorrhoea. This *Apathya Ahara* and *Vihara* (bad habits) leads to vitiation of *Apana Vata* and disturbed their function causes pain. If we take balance diet and follow and Ayurvedic regimen as *Dinacharya* (daily regimen) and *Ritucharya* (menstrual regimen) and avoid stress through Yoga definitely alleviate this burning issue of young girls and women's.

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