



ACUPRESSURE ON DYSMENORRHEA PAIN AMONG ADOLESCENT GIRLS

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ABSTRACT

Menstruation is a periodic and temporary genital bleeding, lasting from menarche to menopause. In addition, it is characteristic of primates and is defined as cyclic uterine haemorrhage, dependent on endometrial disintegration and exfoliation. Dysmenorrhea, on the other hand, is pelvic or lower abdominal cyclic or recurrent pain, associated to menstruation. It is the most common gynaecological complaint among young women, with prevalence between 43% and 93%. According to symptoms intensity, it is also major cause for school or work absenteeism.

Keywords : Dysmenorrhea, acupressure, adolescent girls.

INTRODUCTION

The transition from childhood is not a smooth one. Adolescence is a period of stress for young people. The adolescents must learn who they are and must modify their adult role in life. Adolescents today are faced with many pressures; the older generation did not have.¹

The term “adolescence” is derived from the Latin word “adolescere” meaning to grow, to mature. WHO defines “adolescence as the period in human growth and development that occurs after childhood and before adulthood from the age of 10-19. Adolescents are different both from young children and from adults. They depend on their families, their communities, schools, health services, and their workplaces to learn a wide range of important skills that can help them to cope with the pressures they face and make the transition from childhood to adulthood successfully. Adolescence is subdivided into 3 phases: early adolescence (10-13 years), mid adolescence (14 – 16 years) and late adolescence (17 – 19 years).²Velocity of growth reaches its peak during the adolescent years. Pubertal height spurt begins at an average age of 12 years for girls and gain in height is about 18-23cm and stops with epiphyseal closure. Height spurt begins at an average age of 14 years for boys and it is about 27- 29cm in them. Weight gain is greater than gain in height during early adolescence. This is the most rapid period of growth with a gain of 19 g/day in boys and 16g/day in girls. Weight gain is 25- 30 kg in both sexes. Skeletal growth is completed in adolescence. At the cessation of growth, boys seem to be taller than girls, although at the early adolescent stage, girls are taller than boys. About 25% of adult weight is gained during this period; growth hormone plays a major role in growth spurt. More distal parts of the limbs grow faster first, which gives an awkward appearance (feet and hands), e.g. foot accelerates first followed by calf and

thigh; hands and forearms followed by upper arms. Puberty refers to the period that is characterized by the beginning of the functioning of sexual organs. Overall important physical changes that occur are: changes in body size change in body proportion, primary sex characteristics and secondary sex characteristics. Changes in girls like development of breasts, growth of bony pelvis, growth of pubic and axillary hair, menarche, completion of growth of uterus and vagina etc happens. Changes in boys are increase in the size of genitalia, pubic hair, voice changes, growth of axillary, facial and chest hair, activated sebaceous gland. There is also changes in vaginal PH changes from alkaline to acidic due to growth of Doderlein's bacillus in girls and in boys nocturnal emission or wet dreams at 14 years old, active spermatozoa appears only after 16 years of age.³ Adolescent problems can be grouped in to three categories, i.e. physical, sexual and psychological. Physical problems of adolescents are nutritional problems, infections, menstrual problems, disorders of breasts, penoscrotal problems, skin problems, musculoskeletal problems etc. Sexual problems like precocious sexuality, sexual experimentation, premarital sex, unsafe sex, sexually transmitted diseases. Psychological problems of adolescent like emotional problems, motivational problems, moral problems, mental health problems.⁴

Menstruation is a periodic and temporary genital bleeding, lasting from menarche to menopause. In addition, it is characteristic of primates and is defined as cyclic uterine haemorrhage, dependent on endometrial disintegration and exfoliation, which occurs approximately in a normal cycle of 21 to 45 days, with 2 to 6 days of flow and mean blood loss of 20 to 60ml, in general lasting 40 years. Dysmenorrhea, on the other hand, is pelvic or lower abdominal cyclic or recurrent pain, associated to menstruation. It is the most common gynaecological complaint among young women, with prevalence between 43 % and 93%. According to symptoms intensity, it is also major cause for school or work absenteeism. The word dysmenorrhea comes from the Greek language and means difficult menstrual flow, being one of the most frequent gynaecological affections with higher or lower intensity during menstrual cycle. According to its clinical presentation, primary dysmenorrhea (PD) is characterized by lack of visible structural abnormality or any gynaecological pelvic disease and is the most commonly diagnosed type among teenagers. Functional dysmenorrhea coincides with the onset of regular ovulation cycles, which is more frequent approximately two years after menarche. Major Symptom is lower abdominal or lumbar region pain, followed by other symptoms such as nausea, vomiting, headache and diarrhoea. Pain may decrease after puerperal gravid cycle and due to this, it is suggested that in such patients uterine isthmus is hypertonic; resulting in temporary retention of menstrual flow residues (which causes pressure in this highly innervated area). Approximately 50 to 70% of women have dysmenorrhea symptoms in some moment of life, being that approximately 10% become unable to perform their routine activities.⁵

A cross-sectional study conducted in Goa showed that there was linear association between the severity of pain and its impact on social disadvantage, co-morbidity, somatic syndromes and reproductive factors. The study concluded that the burden of dysmenorrhea was greater than any other gynaecological complaints and associated with significant impact. Most girls respond to primary dysmenorrhea by taking analgesics and anti-inflammatory drugs like mefenamic acid etc. Anti-prostaglandins like mefenamic acid though very effective for treating dysmenorrhea; but it can interfere with the process of ovulation and can cause primary infertility.⁶

Generally, treatment options for dysmenorrhea include both medical and non-medical options. Non-steroidal anti-inflammatory drugs and oral contraceptive pills are the most common pharmacological treatments for primary dysmenorrhea; however, despite the fact that these medications may provide immediate pain relief, their use entails possible adverse reactions, drug dependence, and unnecessary medical expenses. Nonmedical options include bed rest, exercise, heating, and herbal medicines. One therapeutic option for dysmenorrhea is using traditional Chinese

medicine, such as acupuncture, which has been used to treat acute and chronic pains including dysmenorrhea. Some researchers have suggested that manipulating the small myelinated peripheral nerve fibres in muscles with needles dispatches signals to spinal cord, midbrain, and the pituitary axis, resulting in release of substances such as enkephalin, dynorphin, serotonin, norepinephrine, and beta-endorphins, among others, into the bloodstream and cerebrospinal fluid, thus alleviating pain.⁷

Acupressure is one of the most popular alternative modality which has been practiced worldwide presently by activating “The Acupoint Sp6 or San Yin Jiao or Spleen 6” point by pressing and releasing every day as a preventive measure for reducing the problems like pre-menstrual syndrome, dysmenorrhea, and irregular menstruation. A study was conducted to assess the effectiveness of acupressure therapy on menstrual pain perception among adolescent girls with primary dysmenorrhea in Bhopal, M.P, on 60 subjects. The pre-test pain score mean was 6.18 and post-test pain score mean was 1.88. The calculated value of ‘t’ was 7.41 which was very much higher than the tabulated ‘p’ value < 0.005 at 5 % level of significance. This shows that there was very high significant difference between the pain score of pre-test and post-test.⁸ Dysmenorrhea is a significant public health problem. It has an impact on academic activities.⁹

Systematic steps will be followed in both lower legs consecutively by, first locating the prominence of the medial malleolus and then putting four fingers width and applying deep pressure slightly to the level of maximum tolerance behind the tibial bone and massaging the area for 14 times anticlockwise using thumb or index finger. It can be done morning one time, before breakfast.

An experimental study was conducted to assess the effect of acupressure at the San Yin Jiao point (SP6) on primary dysmenorrhea in School of Nursing and Midwifery Iran. The subjects were 36 young college female students. No intervention was carried out at the first cycle. During the two next cycles San Yin Jiao point of the subjects in the intervention group was pressed for twenty minutes at the time of pain. The control group was 15 female students of Iranian medical science. The data was collected using visual analogue scale. The result shown significant difference in the scores of dysmenorrhea between the two groups immediately after (3.50 ± 1.42 v/s 5.06 ± 1.4 , $p=0.004$) and also 3 hours after treatment (1.60 ± 1.98 v/s 4.80 ± 1.37 , $p=0.000$). The study concluded that acupressure was effective on lowering the symptoms of dysmenorrhoea.¹⁰

CONCLUSION

Acupressure is effective method for treating dysmenorrhea. It is no pharmacological, cost effective, and having no side effects. It helps the adolescent girls to lead their menstrual cycle in a harmonious way.

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