

# Traditional Vestibular Stimulation: A Physiological Intervention for Dysmenorrhea

Dear editor,

Dysmenorrhea is one of the most common gynecological problems among female students, which may be the leading cause of absenteeism from college.<sup>[1]</sup> Dysmenorrhea is defined as painful menstrual cramps of uterine origin. It is the common gynecological condition that can affect as many as 50% of women.<sup>[2]</sup> Dysmenorrhea is of two types. The primary is a menstrual pain without any organic pathology.<sup>[3]</sup> When the pelvic pain is associated with identifiable pathological conditions, it is called secondary.<sup>[2]</sup> Dysmenorrhea also may be due to anxiety, emotional instability, a faulty outlook on sex and menstruation, or imitation of the mother's feelings about menstruation.<sup>[4]</sup> Researchers reported that excessive production of prostaglandins, which causes severe uterine contractions,<sup>[5]</sup> which cause pain and decrease blood flow and oxygen to the uterus. Similar to labor pains, these contractions can cause significant pain and discomfort. Prostaglandins may also contribute to nausea and diarrhea.

Currently, standard medical treatments for dysmenorrhea includes the use of Nonsteroidal anti-inflammatory drugs (NSAIDs), which inhibits prostaglandin synthetase, and oral contraceptive pills, which inhibit ovulation thus reducing myometrial activity. However, these drugs are not 100% effective and may have associated with side effects. Though alternative therapies are available but little attention was given toward traditional vestibular stimulation. Swinging is a simple and traditional way of stimulating vestibular system, which was part and parcel in Indian tradition.

Vestibular apparatus was present in the inner ear and provides maximum benefits when stimulated with optimal stimulus. Optimal stimulation will be different to the person to person as pain levels are different from each other. Hence, standardization of vestibular stimulation is necessary. Work is in process at our research center. Vestibular stimulation may relieve pain through its extensive connections with the thalamus, hypothalamus, periaqueductal gray, parabrachial nucleus, cerebellum, nucleus tractus solitarius, and raphe.<sup>[6-8]</sup> We put forward the hypothesis to recommend translational research in this area to bridge tradition and medicine for improving quality and quantity of life of the general population.

**R Archana<sup>1</sup>, Kumar Sai Sailesh<sup>2</sup>, Deepthy Purushothaman<sup>3</sup>,  
B Udaya Kumar Reddy<sup>4</sup>, J K Mukkadan<sup>5</sup>**

<sup>1</sup>Professor, Department of Physiology, Saveetha Medical College, Thandalam, Chennai, Tamil Nadu, India,

<sup>2</sup>Assistant Professor, Department of Physiology, Little Flower Institute of Medical Science and Research,

Angamaly, Kerala, India, <sup>3</sup>PG Student, Department of Physiology, Little Flower Institute of Medical

Science and Research, Angamaly, Kerala, India, <sup>4</sup>President, International Stress Management Association

(ISMA<sup>IND</sup>), India, <sup>5</sup>Professor & Research Director, Little Flower Medical Research Centre, Angamaly,

Kerala, India

#### Access this article online

Quick Response Code:



Website: [www.jmsh.ac.in](http://www.jmsh.ac.in)

#### Address for correspondence:

Dr. R Archana,

Professor,

Department of Physiology,

Saveetha Medical College,

Thandalam, Chennai - 602 105,

Tamil Nadu, India.

E-mail: [dr.rarchana@gmail.com](mailto:dr.rarchana@gmail.com)

## References

1. Charu S, Amita R, Sujoy R, George AT. Menstrual characteristics' and 'prevalence and effects of dysmenorrhea' on quality of life of medical students. *Int J Collab Res Internal Med Public Health* 2012;4:276-94.
2. Weissman AM, Hartz AJ, Hansen MD, Johnson SR. The natural history of primary dysmenorrhoea: A longitudinal study. *BJOG* 2004;111:345-52.
3. Lichten EM, Bombard J. Surgical treatment of primary dysmenorrhea with laparoscopic uterine nerve ablation. *J Reprod Med* 1987;32:37-41.
4. Jeffcoate N. *Principles of Gynaecology*. 4<sup>th</sup> ed. London: Butterworth; 1975.
5. Rosenwaks Z, Seegar-Jones G. Menstrual pain: Its origin and pathogenesis. *J Reprod Med* 1980;25:207-12.
6. Dawood MY. Nonsteroidal anti-inflammatory drugs and changing attitudes toward dysmenorrhea. *Am J Med* 1988;84:23-9.
7. Dawood MY. Dysmenorrhea. *Clin Obstet Gynecol* 1990;33:168-78.
8. Sailesh KS, Archana R, Mukkadan JK. Controlled vestibular stimulation: Novel supplementary treatment for cancer pain - An update. *J Cancer Sci Ther* 2014;6:9.

**How to cite this article:** Archana R, Sailesh KS, Purushothaman D, Reddy BU, Mukkadan JK. Traditional vestibular stimulation: A physiological intervention for dysmenorrhea. *J Med Sci Health* 2015;1(3):31-32.

Date of submission: 07-09-2015

Date of peer review: 10-09-2015

Date of acceptance: 13-09-2015

Date of publishing: 10-10-2015