

## Evidences on Post-Tubal Ligation Syndrome-Short communication

P.N. Dalvi,<sup>1</sup> S.D. Katakhdound<sup>2\*</sup>

<sup>1</sup>Associate Professor, Dept. of Stri Roga and Prasuti Tantra (SRPT), R. A. Potddar Ayurved College, Worli, Mumbai, Maharashtra, India.

<sup>2</sup> Associate Professor, Dept. of Stri Roga and Prasuti Tantra (SRPT), V. P. Ayurved College, Sangli, Maharashtra, India.

### Abstract:

Tubectomy is most accepted method of contraception in India. Tubal ligation may be performed by methods such as minilap and laparoscopic tubal ligation. Tubectomy considered as the minor procedure but its complication disturbs women health. Post-tubal ligation syndrome includes pain during intercourse, aching lower back, premenstrual tension syndrome, difficulty in menstruating, uterine hemorrhage, and absence of menstruation. Objective of this study is to review literature of a post ligation syndrome as well as to review incidence and management of it.

**Keywords:** Contraception, Premenstrual tension syndrome, Tubectomy, Uterine hemorrhage.

Received: 07.07.2021   Revised: 22.09.2021   Accepted: 25.09.2021   Published: 28.09.2021

### Quick Response code



### \*Corresponding Author:

**Dr. S. D. Katakhdound**

Associate Professor, Dept. of Stri Roga and Prasuti Tantra (SRPT), V. P. Ayurved College, Sangli, Maharashtra, India.

Email- [skatakhdound@yahoo.com](mailto:skatakhdound@yahoo.com)

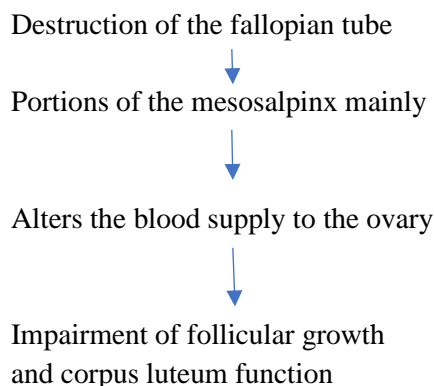
**Introduction**

Post-tubal ligation syndrome includes pain during intercourse, aching lower back, premenstrual tension syndrome, difficulty in menstruating, uterine hemorrhage, and absence of menstruation. <sup>[1,2]</sup> The syndrome is caused by blood circulation problems in and around the fallopian tubes and ovaries, pressure on nerves, and intra pelvic adhesion. <sup>[3-5]</sup> Differentiating between this syndrome and endometriosis during diagnosis and differentiating between functional hemorrhage due to hormonal abnormality and anatomical hemorrhage due to polyp or tumor is very important. Since the symptoms of this syndrome are mild, simple symptomatic treatment is sufficient in most cases. <sup>[6-8]</sup> In some cases, however, desquamation surgery or reversal

of tubal ligation may be necessary. Endoscopic surgery is also available. In Japan, because of widespread use of condoms and Intra uterine devices (IUDs), tubal ligation is not very common. <sup>[9]</sup>

**Materials and methods:**

Evidence for a post-tubal sterilization syndrome was sought in a literature review of over 200 English-language articles. This syndrome has been described, variously, as encompassing symptoms such as abnormal bleeding and/or pain, changes in sexual behavior and emotional health, exacerbation of premenstrual symptoms, and menstrual symptoms necessitating hysterectomy or tubal reanastomosis. <sup>[10-12]</sup>

**Possible pathology**

Women 20-29 years of age with pre-existing histories of menstrual dysfunction are at increased risk of some post-tubal sterilization symptoms. <sup>[13]</sup> The Collaborative Review of Sterilization (CREST) is a large, multicenter, prospective study of tubal sterilization in the United States. This report describes CREST participants who were interviewed immediately before sterilization and again in annual post sterilization interviews for up to 5 years between 1978 and 1988. <sup>[14,15]</sup> The authors analyzed

reported changes in six menstrual cycle characteristics for 5,070 women undergoing interval sterilizations. Longitudinal, multivariate regression was used to adjust for baseline menstrual function and other potential confounders. Five years after sterilization, 35% of the CREST participants reported high levels of menstrual pain, 49% reported heavy or very heavy menstrual flow, and 10% reported spotting between periods.

**Results:**

Multicentric prospective study of female sterilization surgery to study changes in menstrual function following tubal sterilization. Duration of menstrual bleeding, menstrual cycle length, cycle regularity, amount of menstrual bleeding, menstrual pain, and intermenstrual bleeding were examined. 2456 women for two years after tubal sterilization surgery. Each woman served as her own control; her menstrual function at the two-year follow-up interview was compared with her menstrual function at the preoperative interview. Except for menstrual pain among women who underwent unipolar electrocoagulation procedures, there was no increase in the prevalence of adverse menstrual function after tubal sterilization. For all menstrual variables, 50% or more of women with adverse function preoperatively had an improvement by two years after tubal sterilization. Tubal ligation and electrocoagulation may be more likely to do so since they destroy more tissue than other procedures. In fact, an international study among 8486 post Tubal Ligation Syndrome women found that those who underwent electrocoagulation were significantly more likely to experience menstrual changes than those who underwent other procedures. A case control study found much increased prevalence of abnormal cycles 49- and 87-months post TS (ligation and electrocoagulation).

**Discussion:**

Many women report an association between tubal sterilization and the premenstrual syndrome. While early reports suggested such a linkage, more recent studies failed to confirm this association. In an attempt to elucidate the alleged association of tubal sterilization with premenstrual changes, we compared the severity of symptoms and their possible correlates with hormonal levels in 78 sterilized and not sterilized women with prospectively confirmed

premenstrual syndrome. No significant difference could be demonstrated between the groups in both the retrospective and prospective evaluation of the severity of premenstrual syndrome symptoms as well as in luteal hormonal levels.

In *Ayurvedic Samhitas* fallopian tubes are supposed to be *Artav vaha Dhamani* and injury to this structure can cause infertility, dysperunea, pain and amenorrhoea.

**Conclusion:**

Tubectomy is very common and widely accepted surgery in developing countries. Tubal ligation syndrome is common after tubectomy surgery so it is better to counsel patient before surgery

**References:**

1. Shobeiri MJ, Atashkhooi S. The risk of menstrual abnormalities after tubal sterilization: a case control study. *BMC Womens Health* 2005;5(1):5-10.
2. Von Mering R, Merki GS, Keller PJ. Is there a place for tubal ligation in modern contraception? *Gynakol Geburtshilfliche Rundsch* 2003;43(1):25-30.
3. Peterson HB. Sterilization. *Obstet Gynecol* 2008;111(1):189-203.
4. Turney L. Risk and contraception: What women are not told about tubal ligation? *Womens Stud Int Forum* 1993;18(5):471-486.
5. Chan LM, Westhoff CL. Tubal sterilization trends in the United States. *Fertil Steril* 2010;94(1):1-6.
6. Ludermir AB, Machado KM, Costa AM, Alves SV, Araújo TV. Tubal ligation regret and related risk factors: findings from a case-control study in Pernambuco State, Brazil. *Cad Saude Publica* 2009;25(6):1361-1368.
7. Malhotra N, Chanana C, Garg P. Post-sterilization regrets in Indian women. *Indian J Med Sci* 2007;61(4):186-191.

8. Padhye S, Karki C. Voluntary surgical contraception: a study on level of satisfaction. *Nepal Med Coll J* 2003;5(1):18-21.
9. Satoh K, Osada H. Post-tubal ligation syndrome. *Ryoikibetsu Shokogun Shirizu* 1993;(1): 772-773.
10. Kjer JJ, Knudsen L. Hysterectomy subsequent to laparoscopic sterilization. *Eur J Obstet Gynecol Reprod Biol* 1990;35(1):63-68.
11. Fagundes ML, Mendes MC, Patta MC, Rodrigues R, Berezowski AT, de Moura MD, et al. Hormonal assessment of women submitted to tubal ligation. *Contraception* 2005; 71(4): 309-314.
12. Peterson HB, Jeng G, Folger SG, Hillis SA, Marchbanks PA, Wilcox LS, U.S. Collaborative Review of Sterilization Working Group. The risk of menstrual abnormalities after tubal sterilization. *N Engl J Med* 2000;343(23):1681-1687.
13. Harlow BL, Missmer SA, Cramer DW, Barbieri RL, Barbieri RL. Does tubal sterilization influence the subsequent risk of menorrhagia or dysmenorrhea? *Fertil Steril* 2002; 77(4): 754-760.
14. Gentile GP, Kaufman SC, Helbig DW. Is there any evidence for a post-tubal sterilization syndrome? *Fertile steril* 1998;69(2):179-86.
15. MacKenzie IZ, Thompson W, Roseman F, Turner E, Guillebaud J. A prospective cohort study of menstrual symptoms and morbidity over 15 years following laparoscopic Filshie clip sterilisation. *Maturitas* 2010;65(4):372-377.

**Conflict of interest:** Author declares that there is no conflict of interest.

**Guarantor:** Corresponding author is guarantor of this article and its contents.

**Source of support:** None

**How to cite this article:**

Dalvi PN, Katakoud SD. Evidences on Post-Tubal Ligation Syndrome-Short communication. *Int. J. AYUSH CaRe.* 2021; 5(3):203-206.