

STUDY OF THE EFFICACY OF PANCHAKOLA CHURNA IN SUTIKA PARICHARYA IN DE-CREASING THE INCIDENCE OF SECONDARY POSTPARTUM HAEMORRHAGE (PPH)

Sameer Gholap¹, Mangesh Patil², Abhijeet Gokhale³, Divya Pawar⁴

¹Asso. Prof. and Ph.D. Scholar, SMBT College Dhamangaon, T. Igatpuri, Dist. Nashik. 422403), Maharashtra, India

²(Asso. Prof. and Ph.D. guide, YMT Ayurvedic College, Institutional area, Sect. 4, Kharghar, Navi Mumbai 411210), Maharashtra, India

³(M.D. (Agadatantra and V.V.), Medical Officer Gr. A, Sub District Hospital (Govt. of Maharashtra), FCI Road, Manmad, Tal. Nandgaon, Dist. Nashik 423104), Maharashtra, India

⁴Post Graduate Scholar Department of Prasuti Tantra Avum Stiroga, SMBT College Dhamangaon, T. Igatpuri, Dist. Nashik. 422403), Maharashtra, India

Email: divi.pawar94@gmail.com

ABSTRACT

Postpartum Hemorrhage (PPH) is the leading contributor to Maternal morbidity in today's era responsible for approximately 25% of the nearly 300,000 maternal deaths estimated to occur in each year. There is no clear or standard definition for quantity of the blood loss associated with secondary PPH but clinical expressions of this definition vary from 'increased lochia' to massive bleeding. Overall, the reported incidences of secondary PPH in the developed world varies from 0.47% to 1.44%. The etiological factors measure Sub involution of Uterus, Lower genital tract trauma, Placental abnormalities, Uterine abnormalities, vascular abnormalities, Caesarean section wound dehiscence or surgical injury, Coagulopathies etc. *Ayurveda* classics states that if *Sutika Paricharya* followed in complete way may reduce chances of Secondary PPH. Among that *Panchakola Churna Siddha Yavagu* removes placental remnants by *Shodhana* process.

Keywords: Secondary PPH, *Panchakola Churna*

INTRODUCTION

Postpartum hemorrhage (PPH) is a major cause of maternal mortality and morbidity. PPH is classified as Primary i.e. PPH in first 24 hours after delivery^[1] and Secondary i.e. PPH after 24 hours after delivery and up to 6 weeks of delivery^[2]. Secondary PPH has very less

incidence rate of 1 to 2% but mortality and morbidity rate in secondary PPH is very high up to 40% due to big number of non-institutional deliveries, postpartum care at home, high incidence of nutritional anemia,

poor health education etc. in India. The etiological factors measure Sub involution of Uterus, Lower genital tract trauma, Placental abnormalities, Uterine abnormalities, vascular abnormalities, Caesarean section wound dehiscence or surgical injury, Coagulopathies etc. The most important cause of secondary PPH is placental remnants in the uterus [3] The reported incidences of secondary PPH in the developed world varies from 0.47% to 1.44% [4]. In *Ayurvedic* text directions of postnatal care is described in detail. *Garbhashya shodana*, *Vatashamana*, *Dipana*, *Pachana* and *Balya Aushadhi* are the basic principles of postnatal care in Ayurveda. *Garbhashaya Shodhana* is basic *Upakrama* in order to clean the placental remnants in the uterus which is one of the most important causes of secondary PPH. According to all classics, in *Sutika Paricharya Garbhashaya Shodhana dravyas* are indicated in first few days in the form of *Panchakola siddha Yavagu* [5]. It causes expulsion of placental remnants and hence good involution of uterus.

Research Question: - Is *Panchakola Churna* (Trial Drug) effective in *Sutika Paricharya* in decreasing the incidence of secondary PPH than conventional management?

Null Hypothesis (H₀):- *Panchakola Churna* is not significantly effective in *Sutika paricharya* in decreasing the incidence rate of Secondary PPH.

Alternative Hypothesis (H₁):- *Panchakola Churna* is significantly effective in *Sutika paricharya* in decreasing the incidence rate of Secondary PPH.

Primary Objective (Aim):- To study the efficacy of *Panchakola Churna* in *Sutika paricharya* in decreasing the incidence rate of secondary PPH.

Secondary Objective: - To study the efficacy of *Panchakola Churna* in *Sutika paricharya* with respect to Pain, Involution of Uterus, Lactation and Appetite.

Materials:-

1. Case Record forms (Specially designed)
2. *Panchakola Churna* purchased and authenticated from a GMP certified company. *Panchakola Churna* consists of *Pimpli*, *Pimpali mula*, *Chavaka*, *Chitraka* and *Shunthi*.
3. Standardized Sanitary Pads to evaluate per vaginal bleeding.

Methods:- A double armed controlled randomized clinical trial as a Pilot study was performed to evaluate the efficacy of *Panchakola Churna* in decreasing the incidence rate of secondary PPH.

Sample Size:- 1000 PNC patients with normal delivery. As incidence rate of secondary PPH is 1 to 2% only the sample size of 1000 patients were selected for pilot study.

Work Place:- Sub District Hospital, FCI Road, Manmad Tal. Nandgaon, Dist. Nashik.

Clinical Study:- 1000 patients were classified in two groups viz. A and B. Patients from group A were given *Panchakola Churna* capsules in dose of 2 gm (i.e. 4 capsules of 500mg) twice a day before meals with warm water as *Anupana* for first 10 days of puerperium. Group B was observational group and given conventional treatment i.e. Inj. Pitocin 10 IU IM immediately after delivery of baby.⁶ All the patients were observed on weekly interval for six weeks of puerperium and assessed for secondary PPH.

Diagnostic Criteria:-

1. Per vaginal bleeding after 24 hours of delivery and before 45 days.
2. More than 300ml of blood loss in 24 hours i.e. complete soaking of more than 5 standard size sanitary pads in 24 hours.

Assessment Criteria: -

Sr. No.	Criterion	Score with description
1	Pain in abdomen	0 – No pain in abdomen 1 – Slight pain not interfering in daily activities 2 – Pain in abdomen interfering in daily activity 3 – Acute pain in abdomen
2	Appetite	0 – Good appetite i.e. no anorexia for anything 1 – Anorexia for some of the specific things

		2 – Anorexia for whole food
3	Lactation	0 – Adequate lactation for feeding of the baby 1 – Inadequate lactation for feeding of baby and using top feed for baby 2 – No lactation
4	Involution of uterus	0 – Uterus measures \leq or = 13.5cm from pubis symphysis during first 24hours of delivery / Rate of involution of uterus is \geq or = 1.25cm per day / uterus is not palpable above symphysis pubis after 2 weeks of delivery. 1 – Uterus measures $>$ 13.5 cm from symphysis pubis during first 24 hours after delivery / Rate of involution of uterus is $<$ 1.25cm per day / uterus is palpable above symphysis pubis after 2 weeks of delivery.

Observation And Results: -

1327 Post-natal patients were registered for this trial of which 327 patients left the trial due to various causes. Data of 1000 patients was analyzed systematically. Maximum patients i.e. 68% presented in the study were from 18 to 25 years of age, 29.3% were from 26 to 30 years, 1.4% were from 31 to 35 years of age and 0.9% were elder than 35 years of age. 38% patients were primigravida, 49.6% were second gravida and 12.4% were more than second gravida (Multigravida). 61.2% patients were from poor (Annual income $<$ Rs.100000/) socioeconomic class, 38% were from middle (Annual income Rs.100000/- to 500000/-) socioeconomic status and 8 were from rich class (Annual income $>$ Rs. 500000/-). 12 patients from group A and 10 patients from group B i.e. total of 22 patients were having history of prolonged and assisted labour. 11 patients from group A and 16 patients from group B i.e. total 27 patients were having history of primary PPH and managed medically and not intervened surgically. 7 patients; 4 from group A and 3 from group B were having history of retained placenta and removed manually. 2 patients i.e. 0.4% from group A and 6 patients i.e. 1.2% from group B i.e. total 8 patients were presented with symptoms fulfilling the diagnostic criteria of secondary PPH. 4 patients were multigravida and from the age group of 31 to 35 years of age of which 1 patient was having history of retained placenta and manual removal of placenta and prolonged and assisted labour. 2 patients were second gravida, and both were from the age group of more than 35 years. 1 of them had history of breech presentation and prolonged labour. 2 patients were primigravida and both were having history of pro-

longed and assisted labour one of them was having history of primary PPH. Prognosis of symptoms 'Pain in abdomen' and 'Appetite' in group A was significantly better than group B. Changes in lactation was same in both the groups. Involution of uterus in group A was significantly better than group B at the end of 2 weeks after birth.

DISCUSSION

Retained products of conception and infection are the leading causes of secondary PPH. In this study total 8 cases were presented with secondary post-partum hemorrhage. In group A only 2 cases were present because of the treatment regimen of *Panchakola Churna*. It is significantly less than group B.

Sutika ^[6] :- *Sutayaschapi Tatra Syadapara Chenna Nirgata | Prasutaapi Na Suta Stree Bhavatyevam Gate Sati* || (Ka.S.11/6) *Kashyapacharya* has said until and unless *Aparapata* takes place *stree* should not be considered as *Sootika*. This clearly indicates that *Aparapata* (expulsion of placenta) is also very important and it is also the part of delivery process.

Evam cha masadadhyardhanmuktaharadiyantrana | Gatasutabhidhana syata punaravartavadarshanat || (Va.sha.1/100)

Prasuta sardhamasante dristhve va punartave | Sutikanamahina syaditi dhanvantarermatam || (Yo.ra.pa.6/10-2)

Sutika as per *Ayurvedic* literature references of *Ash-tanga Hridaya* and *Yogaratanakar* is she that should be considered for one and half month (45days) from the time of *Apatarpana* ^{[7] [8]}.

Sutika Paricharya ^[9]

According to *Ashtanga Sangraha*, *Balataila* should be given in Puerperal woman. After feeling of hunger, she should be given with Congenial oleaginous substances mixed with either powdered *Panchakola* or powder of *Yawani*, *Upakunjika*, *Cavya*, *Chitraka*, *Yosa* and *Rocksalt*, which she can digest in whole day. The woman who is unfit for Oil should be given with *Laghupanchamula*. After administration of oily substance or decoction her abdomen should be massaged with *Ghrita* and Oil and wrapped with cloth. After digestion liquid rice gruel properly with *Vidaryadi* group or Milk. Hot water precedes *Ghrita*. Regimen used for 3/5/7 nights with light diet along with *Yava*, *Kola*, *Kulattha*. After twelve nights meat soup of wild animals besides oil, *ghrita* or decoction prepared with *Jeevaniya*, *Brimhaniya*, *Madhura*, *Vatahara* drugs used in the form of massage, unguent, irrigation and bathing.

Importance of Sutika Paricharya

In *Sutika* condition following of *Sutika* routine is very important. *Samhita* has said that diseases caused in *Sutika* condition are difficult or impossible to treat. In this context, *Acharya Charak* in eight lesson of *Sharir sthan* has said that there is *Kshayata* and *shithilta* of all *dhatu*s due to development of fetus ^[10]. During the process of labour, there is loss of energy, bodily fluids and blood, hence the patient is all together exhausted. This is the reason, *Sutika Paricharya* is very important to follow. All the *dhatu*s would regain their *samyaavastha* by following this *sutika paricharya*. *Acharya Sushruta* has specially mentioned *Apatarpana Chikitsa* in *Sutika*, but if the female follows *Sutika Paricharya* properly, she gains the health soon. In *Ash-tang Sangraha*, *Acharya Vriddha Vagbhata* has also mentioned the above things in the third chapter of *Sharir sthana*. So, considering all the above factors, if the *Sutika paricharya* is followed properly then the loss of energy and strength which occurs due to the development of the fetus is restored back again. Also, after all she has gone through the pain during labour, loss of bodily fluids and blood, she gains a healthy new life again, if she follows *Sutika paricharya*.

Panchakola consists of *Pimpali*, *Pimpalimula*, *Chavaka*, *Chitraka* and *Shunthi*. The properties of *Panchakola* are described in *Bhavaprakash Nighantu* ^[11]. Therefore, *Panchakola Churna* is *Katu*, *Ushna*, *Tikshna* and *Pachana*. Characteristic property of *Katu rasa* is *Bhedana* of *Sanghata* therefore it liquefies the blood clots and causes excretion of *dushta Rakta* collected inside the uterus and vagina which causes good involution of uterus. *Tikshnaguna* causes *Shodhana* of *Garbhashaya* (Uterus) which causes excretion of residual endometrium and remaining parts of membranes which remain adhere to uterine wall and prevent uterus to contract completely. *Panchakola* has *Pachana*, *Ruchikara* and the best *dipana* property which helps to increase appetite of *Sutika* because due to labour she suffers from *Agnimandya*. Also, due to *Pachana guna* *dushita dhatu*s get metabolized and *mala bhaga* is excreted in the form of 'Lochia' *Panchakola* is described as *Anaha* and *Shoolanashaka* which causes decrease in pain in abdomen earlier than normal. It is *Kapha* and *Vata Nashaka*. *Sutika* is a state of *Vata* dominance. Therefore, it causes *Vatanashana* and helps *Vata* to maintain its normal *Gati*. It causes complete expulsion of all the products of conception without interruption earlier than normal which in turn results in proper involution of uterus. *Kapha* causes *Shaithilya* in *Garbhashaya* which prevents early and proper contraction of uterus resulting in PPH. *Panchakola* is *Kaphanashaka* and due to *ushna guna* it causes decrease in *Garbhashaya shaithilya* which helps to contract uterus properly and hence preventing PPH. Overall, it clearly indicates that *Panchakola Churna* is a good medicine for cleansing of uterus, and contracting it properly which prevents Post-partum hemorrhage. Therefore, *Kashyapa* stated that ^[12]

CONCLUSION

Panchakola Churna regimen 2 gm BD for first 10 days after 24 hours of normal delivery significantly reduces the incidence rate of secondary PPH. *Panchakola Churna* decreases Pain in abdomen and Anorexia. *Panchakola Churna* causes better and early involution of uterus than normal. *Panchakola Churna* does not affect lactation.

REFERENCES

1. D C Dutta. 28th chapter Complications of third stage of labour. In: Hiralal Konar. Textbook of Gynaecology, 6th ed. New Delhi: Jaypee Publications; Enlarged and revised, Reprint Nov 2015:474.
2. The Management of Secondary Postpartum Haemorrhage, K. M. Groom and T. Z. Jacobson, 466pp, 56th chp, 2018
https://www.glowm.com/pdf/PPH_2nd_edn_Chap-56.pdf
3. D C Dutta. 28th chapter Complications of third stage of labour. In: Hiralal Konar. Textbook of Gynaecology, 6th ed. New Delhi: Jaypee Publications; Enlarged and revised, Reprint Nov 2015:483.
4. Hoveyda F, Mackenzie IZ. Secondary postpartum hemorrhage: incidence, morbidity and current management. BJOG 2001; 108:927-930.
5. https://elearning.rcog.org.uk/sites/default/files/Postpartum%20haemorrhage/Hoveyda_BJOG_2001.pdf
6. Ayurveda Prassutitantra evam Striroga, Prasutitantra, 9th adhyaya Sutika Vidyaniya, Part I, edited by Prof. (Km.) Premvati Tewari, 2nd edition Reprint, Chaukhamba Orientalia, Varanasi, 2017:547
7. Pandit Hemraja, Vriddha jivaka, Kasyapa Samhita or Vriddhajivakiya tantra, Vyotini hindi commentary, By Shree Satyapala Bhisagacharya, Kheelasthana, Sutikopakramaniya adhyaya, 11/6, Chaukhamba Sanskrit Sansthan, Varanasi, 2010:305
8. Vagbhata Krita Ashtang Hridaya, Sarth Vagbhat, Garbhavakranti Adhyay, 1/100, edited by Dr.Ganesh Krushna Garde, Rajesh Prakashan, Pune, 2012:128.
9. Yogratnakara, Vidyodini Hindi Tikakoshatam, Uttardardha, Sutikarogadhikara, 6/10-2, 7th ed, Edited by Vaidya Shree Laxmipati Shashri, Bhisagratna Shree Bramhashankar Shashri, Chaukhamba sanskrita sansthan Varanasi, 2002:428,
10. Vagbhata kruta Ashtang Sangraha, 3rd chapter Garbhopcharaniya Adhyay, 3/38, edited by Ganesh Sharma, Sthanaiyurved Prakashan, 1867:208.
11. Agnivesa, chakrapani dutta, Caraka Samhita, Vol.2, Sharir Sthana 8, Jatisutriya Adhyay, edited by Kaviraj Shree Gangadhara, Chaukhamba Sanskrit Pratishthan, Delhi, 1857:2063.
12. Bhava Prakasha of Bhavamisra with English Translation, translated by Prof. K. C. Chunekar, Commented by Dr Bulusu Sitaram, Haritkyadi varga 6th chapter 6 (II)/73, Chaukhamba Orientalia, Varanasi, 2012:24.
13. Pandit Hemraja, Vriddha jivaka, Kasyapa Samhita or Vriddhajivakiya tantra, Vyotini hindi commentary, By Shree Satyapala Bhisagacharya, Kheelasthana, Antaratnichikita adhyay, 10/94, Chaukhamba Sanskrit Sansthan, Varanasi, 2010:298
14. Agnivesa, chakrapani dutta, Caraka Samhita, Vol.2, Sharir Sthana 8/48, Jatisutriya adhyay, edited by Kaviraj Shree Gangadhara, Chaukhamba Sanskrit Pratishthan, Delhi, 1857: 2065.

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Divya Pawar et al: Study Of The Efficacy Of Panchakola Churna In Sutika Paricharya In De-Creasing The Incidence Of Secondary Postpartum Haemorrhage (PPH). International Ayurvedic Medical Journal {online} 2020 {cited April, 2020} Available from: http://www.iamj.in/posts/images/upload/3217_3221.pdf