



महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

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डॉ. कलिदास द. चव्हाण

एम.बी.बी.एस., एम.डी. (न्यायवैद्यकशास्त्र), पीएच.डी., डी.एससी.

कुलसचिव

O. No. MUHS/URD/ 158 /2021

Dr. Kalidas D. Chavan

M.B.B.S., M.D. (Forensic Medicine), Ph.D, D.Sc.

Registrar

Date: 06/10/2021

To

The Dean/Director/Principal,

Hon. Shri Annasaheb Dange Ayurved

Medical College, Post Graduate &

Research Centre, A/p. Astha, Tal. Walwa,

Dist. Sangli - 416 301.

Sub: - Approval of Research Grant of Long Term Research Grant (LTRG) 2019-20.

Ref.: - Application of Dr. Tinkuganesh Prabhu Khalache dt. 19/10/2019 for LTRG

Dear Sir/Madam,

With reference to above subject and application for LTRG cited at reference, this is to inform you that the proposal for Long Term Research Grant scheme for academic year 2019-20 of Dr. Tinkuganesh Prabhu Khalache, research grant has been sanctioned for **Rs. 25,000/- (Rupees Twenty Five Thousand Only)** for Research Topic: **Randomized Controlled Trial of Panchkolasav In Puerperal Uterine Involution After Cesarean Section.** It may be noted that the sanctioned grant for the research will be released only after completion of research by the concerned teacher.

He may initiate his research work and send the project completion report within stipulated time of one year. **The duration of long-term research is ONE year only & may be extendable up to one more year with justified reasons. The teacher will utilize the amount of research grant towards the expenses incurred for materials and consumables procured for completing the project only.**

The teacher is expected to present his interim/final research observations in the MUHS State Level Research Conference and submit the research manuscript by e-mail to hsr@muhs.ac.in for publication in MUHS Health Science Review.

Research Grant will be released to the bank account of your institute after acceptance of final project report of completed research and its approval by the University scrutiny committee.

You are requested to monitor expenses incurred by the teacher for research. The utilization certificate, statement of expenditure duly certified by registered CA and hard as well as soft copy of Dissertation within 03 months after receipt of grant by email to urd@muhs.ac.in & muhsurd@gmail.com must be submitted through you by the concerned teacher.

Registrar

Copy to:

Dr. Tinkuganesh Prabhu Khalache.

Hon. Shri Annasaheb Dange Ayurved

Medical College, Post Graduate &

Research Centre, A/p. Astha, Tal. Walwa,

Dist. Sangli - 416 301.

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

SYNOPSIS FOR LONG TERM RESEARCH GRANT

TITLE

**RANDOMIZED CONTROLLED TRAIL OF PANCHKOLASAV IN PUERPERAL
UTERINE INVOLUTION AFTER CESAREAN SECTION**

SUBMITTED BY

DR. TINKU-GANESH PRABHU KHALACHE

**ASSOCIATE PROFESSOR
DEPARTMENT OF STRI ROG – PRASUTI TANTRA**

YEAR

2019-2020

**HON. SHRI ANNASAHEB DANGE AYURVED MEDICAL COLLEGE, ASHTA,
DIST. SANGLI**

The puerperium is the period of time between the completion of delivery or delivery of the placenta and membranes and the return of the reproductive tract to its non-pregnant condition. For all practical purposes this period lasts 6 weeks. The puerperal uterus exhibits a dynamic involution process during the first 2 weeks after delivery. The features of nulliparity are never regained in the breast and lower genital tract (Perineum, vagina & cervix). In non-lactating mother it may take long. The uterine involution after cesarean section is slower and unsteady which is more conscious in re-sections.

In Ayurveda sutika is considered just like an extremely old and perishable cloth which will tear with slightest negligence also in this regard Kashayapa says-

परिजीर्णं यथा वस्त्रं मलदिग्धं समन्ततः ।
क्लेशेन शोध्यते तज्ज्ञैः प्रदृश्य तत्तदाश्रयम् ॥
तथा शरीरं सूतायाः परिक्लिष्टं परिस्त्रुतम् ।
भृशं दोषबलैर्दिग्धं क्लेशेन परिशोध्यते ॥

का.सं.खि. ११/४६-४७

So every care has to be taken to protect women after delivery in her puerperal period irrespective of the mode of delivery.

AIM

To determine the efficacy of Panchkolasav in reverting back the anatomical and physiological functions back to near pre-pregnant state after cesarean .

OBJECTIVE

1. To ensure normal involution of uterus as seen in normal vaginal delivery.
2. To prevent post-partum complications.
3. To support health status of mother during puerperium.
4. To reduce perinatal mortality and morbidity.

DRUG REVIEW

Drug	Latin name	Family (Kula)	Ras-Virya-Vipaka	Guna	Karma
Pippali	Piper longum	Piperaceae (Pippalikula)	Katu (Dry) Madura (wet)- Anushnasheeth - Madura	Laghu, Snigdha Tikshna	Nourishes Stanya &Raja, root – garbhashayasan kochaka
Pippalimua	Piper longum radix	Piperaceae (Pippalikula)	Katu-Tikta- Ushna- Katu	Laghu, Ruksha, Tikshna	Garbhashayasa nkochaka&sho dhana- prevents makkalshoola.
Chavya	Piper retrofractu m	Piperaceae (Pippalikula)	Katu- Ushna- Katu	Laghu, Ruksha	Dipan, pachana, vatanulomana Shoolprasha- mana
Chitraka	Plumbago Zeylanica	Plumbaginace --ae (ChitrakaKula)	Katu- Ushna- Katu	Laghu, Rukshna, Tikshna	Dipan, pachana, Garbhashaysan kochkara Garbhastrav- akar
Shunti	Zingiberof ficinaleRo sc.	Zingiberaceae (Ardraka Kula)	Katu- Ushna- Madura	Laghu Snigdha	Agni deepan Aampachana Vatanulomana Shool prashamana Raktshodhaka

MATERIAL

Drug:-

1. Panchkolasav

2. Contents

a. Pippali

b. Pippalimula

c. Chavya

d. Chitraka

e. Shunti

EXCLUSION CRITERIA

1. Women with pre-term LSCS
2. Puerperal Hypertension and gestational Hypertension
3. Pre-eclamptic toxemia and gross Anaemia.
4. Second Gravida with LSCS

CRITERIA FOR DISCONTINUATION OF THERAPY

1. Unable to tolerate the drug.
2. Complications like hemorrhage, infection etc.
3. Patient failure to report for follow up or irregular in taking medication.

ASSESSMENT CRITERIA

The efficacy of the therapy will be assessed from the following parameters.

DAYS

Sr. No.	PARAMETERS	1	2	3	4	5	6	7	30	45
1.	Reduction of uterine fundal height - incms.									
2.	Lochial Discharge (Days & Pads)									
3.	Onset & Maintenance of Lactation									
4.	Bowel movements									

OBSERVATIONS AND RESULTS

1. Observations will be made through a case record form designed with various physical and laboratorial investigations.
2. Follow-up of the cases will be as follows-
 - a) I – After 7 Days
 - b) II – After 30 Days
 - c) III- After 45 Days
3. All necessary information will be collected as per assessment criteria and overall improvement in general health will be assessed.

CONSENT FORM

TITLE OF PROJECT

RANDOMIZED CONTROLLED TRIAL OF PANCHKOLASAV IN PUERPERAL UTERINE INVOLUTION AFTER CESAREAN SECTION

Date -

Participant's Name -

Address -

1. The details of the study have been provided to me in writing and explained to me in my own language.
2. The purpose of the study is to prevent maternal morbidity, early recovery & resume to day to day work, prevention of post-operative complication and improvement of general health.
3. The study drug will be given daily and assessment of the parameters will be done accordingly.
4. The benefit of the study is that there will be early recovery, prevention of post-operative complication & morbidity and improvement of general health.
5. There is no relatively risk of health involved in the study.
6. Taking part in the study is voluntary and no consideration (money or gift) will be given to the participant.
7. During the study the participant is free to withdraw anytime without any reason.
8. The data collected, analyzed can be used for further studies or can be published.

Sign / Thumb impression

(Name)

Witness

Name & Sign./Contact No.-

Investigator

Name

Address / Contact No. -

11. Contraception used : Type :

12. AsthavidhParikshan:

- | | | | |
|------------|------------|----------|-----------|
| a. Pulse | b. Stool | c. Urine | d. Tongue |
| e. Shabdha | f. Sparsha | g. Druk | h. Akruti |

13. General Examination :

- | | | | |
|----------|---------|----------|----------|
| a. Nails | b. B.P. | c. Teeth | d. Temp. |
|----------|---------|----------|----------|

14. Systemic Examination :

- | | | |
|---------|--------|--------|
| a. R.S. | b. CVS | c. CNS |
|---------|--------|--------|

15. Investigations : a. CBC b. Urine

16. StrotasParikshan :

- | | |
|----------------|-----------------|
| a. Rasavaha : | b. Raktavaha : |
| c. Mansavaha : | d. Medovaha : |
| e. Asthivaha : | f. Majjavaha : |
| g. Udakavaha : | h. Pranavaha : |
| i. Annavaha : | j. Purishvaha : |
| k. Mutravaha : | l. Swedovaha : |
| m. Manovaha : | |

17. ArtavahaStrotas :

Budget Requirements

Sr.No.	Details	Rs.	Justification
1	Drug - Panchkolasava	10000	Raw material & drug Preparation
3	Stationary	10000	Record Purpose
4	Printing & Statistics	25000	Record keeping
5	Hospital Administration	19000	Staff Maintenance
7	Printing & project writing	10,000	Preparing reports etc
	Grand Total	74000/-	



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डॉ. कलदास द. चव्हाण

एम.बी.बी.एस., एम.डी. (न्यायवैद्यकास्त्र), पीएच.डी., डी.एस्सी.

कुलसचिव

O. No. MUHS/URD/ 166 /2021

Dr. Kalidas D. Chavan

M.B.B.S., M.D. (Forensic Medicine), Ph.D., D.Sc.

Registrar

Date: 06/10/2021

To

The Dean/Director/Principal,

Hon. Shri. Annasaheb Dange Ayurved Medical College,

Post Graduate & Research Centre,

A/p. Ashta, Tal. Walwa,

Dist. Sangli - 416 301.

Sub: - Approval of Research Grant of Short Term Research Grant (STRG) 2019-20.

Ref:- Application of Miss. Akshata Panditrao Patil, dt. 09/11/2019 for STRG

Dear Sir/Madam,

With reference to above subject and your application for STRG cited at reference, this is to inform you that the proposal for Short Term Research Grant scheme for academic year 2019-20 of Miss. Akshata Panditrao Patil, research grant has been sanctioned for **Rs. 24,000/- (Rupees Twenty Four Thousand Only)** for Research Topic: **Physico Chemical Analysis of Kajjali And Rasaparpati**. It may be noted that the sanctioned grant for the research will be released only after completion of research by the concerned student.

She may initiate her research work and send the project completion report within stipulated time one year. **The duration of short-term research is SIX months & may be extendable up to ONE year with justified reasons. The student will utilize the amount of research grant towards the expenses incurred for materials and consumables procured for completing the project only.**

The student is expected to present her interim/final research observations in the MUHS State Level Research Conference and submit the research manuscript by e-mail to hsr@muhs.ac.in for publication in MUHS Health Science Review.

Research Grant will be released to the bank account of your institute after acceptance of final project report of completed research and its approval by the University scrutiny committee.

You are requested to monitor expenses incurred by the student for research. The utilization certificate, statement of expenditure duly certified by registered CA and hard as well as soft copy of Dissertation within 03 months after receipt of grant by email to urd@muhs.ac.in & muhsurd@gmail.com must be submitted through you by the concerned student.

Registrar

Copy to:

Miss. Akshata Panditrao Patil.

Hon. Shri. Annasaheb Dange Ayurved Medical College,

Post Graduate & Research Centre,

A/p. Ashta, Tal. Walwa,

Dist. Sangli - 416 301.

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

SYNOPSIS FOR SHORT TERM RESEARCH GRANT

TITLE

**PHYSICO - CHEMICAL ANALYSIS AND CHARACTERIZATION OF
*KAJJALI AND RASA PARPATI.***

SUBMITTED BY

- 1. PATIL AKSHATA PANDITRAO**
- 2. MOHITE HARSHADA SHAHAJI**
- 3. JADHAV NIKITA DILIP**

Under the Guidance

DR. M. P. INAMDAR

Professor and HOD, Dept. of Rasashastra,

Hon Shri Annasaheb Dange Ayurved Medical College, Ashta, Dist- Sangli

YEAR

2019-2020

HON. SHRI ANNASAHEB DANGE AYURVEDIC MEDICAL COLLEGE, ASHTA

DIST-SANGLI

TITLE

PHYSICO - CHEMICAL ANALYSIS AND CHARACTERIZATION OF KAJJALI AND RASA PARPATI

INTRODUCTION :

In Ayurvedic system of medicine, Mercurials perform a vital role. The ancient author described “*Rasa Chikitsa*” as best treatment .Therefore without *Rasa (Parada)* Ayurvedic medicine cannot be fully successful. Though Mercury cannot be used in its usual status , it should be processed with mainly Sulphur and other metals. The highly toxic effect of Mercury vanishes when it processed with Sulphur . Hence the preparations like *kajjali* and *Rasaparpati* play vital role in Ayurveda. *kajalli* prepared from Purified *Parada* and Purified *Gandhaka* is having play *anulomana* or *Sara* property while *Rasa Parpati* prepared from the same ingredients has *Grahi* property . As both made from Mercury and Sulphur as main ingredient their properties are different. That curiosity encouraged to conduct this study for Physico-Chemical analysis and Characterization of *Kajjali* and *Rasaparpati*

AIM:

Analyse the Physico-Chemical analytical parameters and characterization parameter of *Kajjali* and *Rasa Parpati*

OBJECTIVES OF THE STUDY :

1. To evaluate the pharmaceutical characteristics of *Kajjali* and *Rasa parpati*
2. To compare the Physico-Chemical characteristics of *Kajjali* and *Rasa Parpati*
3. To take review of literature

RESEARCH QUESTION :

Is the pharmaceutical characteristics of *Kajjali* and *Rasa parpati* are the same or why make it differ ?

RESEARCH HYPOTHESIS :

H₀ : There is no significant difference in the pharmaceutical characteristics of *Kajjali* and *Rasa parpati*

H₁ : There is significant difference in the pharmaceutical characteristics of *Kajjali* and *Rasa parpati*

REVIEW OF LITERATURE :

1. Choudhary, Ankesh Kumar Agrawal and Swapnil. *Analysis of Rasa Parpati through advanced analytical technique*. Vol. 6. 2017.
2. Choudhary, Vinamra Sharma and. *Characterization of Hg based Ayurvedic drug Kajjali: Classical and contemporary approaches*. Vol. 11. Current Science, 2018.

MATERIALS & METHOD:

1. Pure Mercury [*Shudha Parada*]
2. Pure Sulphur[*Shudha Gandhak*]
3. Banana leaf

RESEARCH METHODOLOGY:

Preparation of *Kajjali*

धातुर्भोगंधकाध्यैच्च निरद्रवयीर्मदितो रसाः ।

सुर्लोष्णः कज्जलाभोऽसौ कज्जली इत्याभिधीयते॥

[Rasa Ratna Samuchchaya 8 / 5]

1. Suphur and *Parada* are purified according to classical reference and is taken in *khalwayantra*
2. Both ingredients are rubbed properly till its fluid content is lost.

3. Rubbing of the mixture is done for 7 days .
4. This process is continued till the mixture gets soft , black colored and lusterless .
5. Examination of *kajjali* is done.

Preparation of *Rasaparpti*

शुद्धपारधगांधाभ्याम कृता पर्पटीका नृणाम ।

निहन्ति ग्रहणी क्षौद्रयुतां पथ्यभुजां नृणाम ॥

[रसचंडासु ग्रहणी चिकित्सा ४४०]

1. Production of *kajjali* from Mercury (*Parada*) and Sulphur (*Gandhak*)
2. Small quantity of *ghee* is applied on banana leaf .
3. Small quantity of *ghee* is applied on iron spoon and *Kajjali* is added to it .
4. The *Kajjali* is mixed with *ghee* in the spoon and is heated on mild flame.
5. After melting , *Kajjali* is poured on banana leaf and another banana leaf is placed over it and is pressed well .
6. Wait for 4-5 minutes .
7. The upper leaf of banana is removed and *Madhyama paki Rasaparpati* is taken out .
8. *Rasa Parpati* is then washed with warm water and is dried. It is powdered and stored in bottle.
9. Examination of *Rasaparpati* is done.

OBSERVATION AND RESULT:

ANALYSIS OF SAMPLE OF *KAJJALI* AND *RASAPARPATI*:

The sample of prepared *kajjali* and *Rasa Parpati* is analysed with reference to CCRAS Manual.

Physico-chemical analysis

Sr.No.	Description	<i>Kajjali</i>	<i>Rasa Parpati</i>
1	Colour		
2	Odour		
3	Taste		
4	Loss on drying at 105 ⁰ C		
5	Total Ash		
6	Acid insoluble Ash		
7	pH		
8	Particle Size		
9	Assay for elements- Pb,Cd,Hg,Ar		
10	Parameters for characterization XRD SEM		

CONCLUSION

Conclusion will be drawn from all above study

BUDGET REQUIREMENT-

Sr.No.	Details	In Rs.	Justification
1	Raw Material		
	Mercury	4000	Raw material and drug preparation
	Sulphur	300	Raw material and drug preparation
	Total	4300	
2	Drug Standardization	16000	Standardization in Nikhil laboratory Sangli
3	Stationary	1000	Record keeping
4	Equipment Maintainence	2000	Shirodhara Yantra and Others
5	Printing And Project Writing	2000	Preparation reports etc.
6	Labour Charge	1000	
	Grand Total -	26300	

REFERENCES

1. Sharma, Pranacharya Shri Sadanand. *Rasa Tarangini*. Pandit Kashinath Shastri, 2004.
2. JHa, Dr.Chandrabhushan. *Ayurvediya Rasa Shastra*. Choukhamba Surbharati Prakashan, 2003.
3. Kulkarni, Prof.Dattatreya Anant. *Rasa Ratna Samuchchaya*. Meherchanda Lachhmandas publications, 1998.