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Research Article

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EFFICACY OF JIRAKADI KWATH IN GARBHOPADRAVA SHOTHA W.S.R. PREGNANCY INDUCED HYPERTENSION

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ABSTRACT

Pregnancy is a particular and unique state of mind and body of a woman. In antenatal period many times we come across some abnormal signs and symptoms among which Garbhopadravshotha is commonly seen. Garbhopadrava shotha is one of the causes of fetal retardation and increase in fetal and maternal morbidity. In the present study, Garbhopadravshotha is managed with a combination of invaluable Ayurvedic medicinal plants. According to Nighantu Ratnakar Jirakadi kwath is useful in Garbhopadrav shotha. So pregnant women having pedal Oedema, proteinuria and hypertension

as main signs were given this decoction and examined before and after treatment. Observations recorded and conclusion made. As per this study patients showed relief in pedal Oedema and other symptoms. There was no significant change in the blood pressure of the patients.

KEYWORDS: Garbhopadrava shotha, (pedal) Oedema, hypertension, Jirakadi kwath.

INTRODUCTION

Life of a woman is said to be complete when she becomes mother. Garbhini avastha is prestage of motherhood, therefore uneventful pregnancy is essential for healthy child. Ayurveda has described Garbhiniparicharya for pregnant women. But due to busy lifestyle most of the women pay less attention towards their health. This leads to many complications in pregnancy. This leads to abnormal symptoms which are named as Garbhopadravas. In HaritSamhita 8 Garbhopadravas are explained.

शोषहल्लसच्छर्दीश्चशोफज्वरास्तथारुचि:।

अतिसारो विवर्णत्वं अष्टौ गर्भोपद्रवाः स्मृतः ॥

हा.सं. 450

As aacharyas said as far as possible *Shaman chikitsa* i.e palliative treatment should be given. While reading Nighantu Ratnakar, I came across a drug which can be useful in *Garbhopadrava shotha*. So I selected this yog.

श्वेतकृष्णजीरक कटुकीकषायो गुर्व्याः शोथहत् नि. र. गर्भिणी रोग 840 Various studies have been done on *Garbhopadrava shotha* previously.

Practically we see patients with pregnancy induced hypertension having resemblance with *Garbhopadrav Shotha*.

In *Samhita* we don't get detail explanation about *Garbhopadrava shotha*, We can explain *Samprapti*(Pathogenesis) of *Garbhopadrava shotha* on the basis of *Samanya samprapti*.

- (1) In pregnancy, there is increase in Aap- bhava.
- (2) Increased fetal needs requires increase in-take.
- (3) Work load on *Agni*
- (4) Agnimandya in pregnant woman
- (5) Mala formed by fetus retransferred to mother.

In such condition, if patient does *Hetusevan* (wrong habits leading to pathology), *Agnimandya* will be severe and turned to *Asar sam ras* formation. This *Asar ras* transferred to fetus through *Apara* (placenta) and *Garbhanabhinadi* (Umbilical cord) The undigested *Asar-ras* along with excessive *Mala* will be retransferred to mother. Due to excessive *Aaharras* and *Agnimandya*, already there is excessive *Mala* formation in pregnant woman.

In 3 rd trimester, predominance of *Vatadosha* is present.

Rakta, Pitta and Kapha get vitiated by aggravated Vatadosha. They are taken by Vata to Bahyasira where they cause obstruction to normal pathway of Vata. The Vata gets Vimargaga i.e.it changes pathway and causes the aggravated Doshas coming out Sira due to Siratanutwa. They start accumulating in Twacha and Mansa, which causes elevation i.e. Utsedh or Shotha.(Oedema)

AIMS AND OBJECTIVES

- 1. To study the utility of *Jirakadi kwath* described in Nighantu Ratnakar in *Garbhopadrava Shotha*
- 2. To use herbal drugs in Garbhopadrava shotha.
- 3. To see the severity of Garbhopadrava shotha according to age and parity.
- 4. To find out incidence and character of drug related side effects.

MATERIALS AND METHODS

Aacharyas has explained dynamic formulation for Garbhopadrava shotha which has no side effects like other medicines hence selected this drug.

Patients - Inclusion criteria

- (1) Indoor & outdoor patients suffering from *Garbhopadrava shotha* with or without albuminuria & hypertension
- (2) Patients of any parity.

Exclusion criteria

- (1) Patients with previous diseases like hypertension, cardiac, endocrine, renal, hepatic disease with *Shotha*.(Oedema)
- 2) Shotha as a pressure symptom.
- (3) Shotha due to Garbhini pandu(anaemia).

Work profile

30 patients from indoor and outdoor department as per previously stated criteria were selected randomly & provided.

Jirakadi kwath 30 ml. twice daily, orally for 15 days

Signs & symptoms for assessment were as follows.

- (1) Utsedh/Oedema
- (2) Angagourav
- (3) Agnimandya
- (4) Aruchi
- (5) Weight gain
- (6) Albuminurea
- (7) Oligourea
- (8) Hypertension

Investigations done

- (1) Haemogram
- (2) Urine (R)
- (3) Blood urea level
- (4) Sr. Uric acid
- (5) Sr. Creatinine
- (6) HIV and VDRL

If necessary – Fundoscopy

- Liver function test

Yoga given is selected with reference to Nighantu Ratnakar

श्वेतकृष्ण जीरक कटुकीकषायो गुर्व्याः शोथहत्।

नि. र. गर्भिणी रोग प्रकरण पान. क्र. 840

Contents – *Jirakdwaya*, *Katuki* in decoction form with honey.

Dose – 30 ml. twice daily, 15 days. *Vatakal*

Anupan

Madhu had given as Anupan.

Observation

- (1) *Utsedh* (Oedema)
- (A) By measurement of Oedema in centimeter with the help of measuring tape and gradation are made.

Sarvangashotha - severe

Hastapad shotha - Moderate

Padashotha - mild.

Simultaneously measurements of legs were recorded at –

- (1) ankle joint
- (2) foot
- (3) 4 inches proximal to ankle joint .decrease or increase in circumference were measured and considered during results.

Related to

Pitting or non-pitting

- (1) Vataj shotha प्रोन्नमति, प्रपीडितो च.चि.12/12
- (2) Pittaj shotha Not given specific
- (3) *Kaphaj shotha* निपीडितो नोन्नमति । च.सू. 12/13
- (1) Related to day & Night

Vataj shotha दिवाबली

Pittaj shotha – Not specific given.

Kaphaj shotha – निशाबली

- (2) Angagourav it is denoted as
- 0 absent
- + occasional
- ++ 4-5 hrs. after meals
- +++ always.
- (3) Agnimandya -0 absent
 - + Hunger after 4-5 hrs.
 - ++ Hunger after 8-10 hrs.
 - +++ Meals taken only once
- (4) Aruchi
- 0 absent
- + present
- (5) Excessive weight gain Weight is monitored
- (6) Urine examination
- (A) Input / output chart per 24 hrs.
- (b) Urine albumin chart twice daily
- U/A 0 absent
 - + mild albuminuria
 - ++ moderate albuminuria
 - +++ severe albuminuria

(8) Blood pressure- thrice daily in admitted patients and daily in outpatient department patients.

Drug information

1. Shwetjiraka - Cuminum cyminum

Family - Umbelliferae

Upyuktang (used part) - Beej (seeds)

Properties

Rasa - Katu

Vipak - Katu

Virya - Ushna

Guna - Laghu & Snighha

Doshghnata - Kaphavata

Other properties - Deepan, Pachan, Vatanuloman, Shoolprashaman, Krimighna

2. Krishnajirak - carumn bulbocastanum

Family - umbelliferae

Upayuktang(used part) - Beej((used part)

Properties -

Rasa – Katu

Vipak – Katu

Veerya – Ushna

Guna – Laghu, snigdha

Deepan, Pachan, Grahi, Srotorodhnashak

Garbhashayshuddhikar

3. Kutaki

Latin Name - Piororrhiza kuroa

Famiy - Scrophulariaceae

Upyuktang(used part) - *Mula (bhoumik kand)*(root)

Gana, Bhedaniya, Lekhniya, Stanyshodhan, Tiktaskandh (Charak)

Guna - Ras - Tikta

Vipak – Katu

Virya – Sheet

Guna - Laghu, Ruksha

Other Properties

Deepan, Pachan, Yakruttejan, Pittasarak, Bhedan, Drug standardization done.

OBSERVATIONS

After using *Jirakadi kwath* observations are obtained in relation with parity, age, gestational age, *Doshaj* type of *Garbhopadrava shotha*, change of weight, changes in signs and symptoms. Observations showed that primies are more prone for *Garbhopadrava shotha*, then onwards the percentages goes down. In our study all patients were in IIIrd trimerter

Percentage of *Garbhopadrav shotha* in *Vatapradhan Kaphanubandhi* & *Kaphapradhan Pittanubandhi* are highest i.e. 30% & 33% respectively.

Percentage of *Pittapradhan prakruti* suffering from *Garbhopadrava shotha* are much less in comparison with others.

Kaphaj shotha is found in maximum patients.

In our study, no patient showed weight loss, as simultaneously fetus is growing. 13.3% patients showed constant weight. 86.66% patients showed weight gain. Among them 60% patients showed negligible weight gain which is significant. This weight gain can be due to weight gain of foetus in 15 days. 10% patients showed weight gain of more than 1 kg.

- (1) *Anga gourav* In our study 10% patients had severe *Angagourav*, 56.66% patients had moderate *Angagourav* and 33.33% patients had mild *Angagourava*.
- 83.83 patients had complete releif.
- 13.33% patients had mod. Relief & 3.33% patient had no releif.

(2) Agnimandya

Before treatment 10% patients had moderate *Agnimandya* and 90% patients had mild *Agnimandya* Among there 96.66% patients had complete releif and 3.33% patients still had *Agnimandya* Otherwise all other patients had improved apetite

(3) Aruchi

In our study 23.33% patients had *Aruchi*, Among these 20% patients having *Aruchi* get relief. 3.33% patients did not show relief.

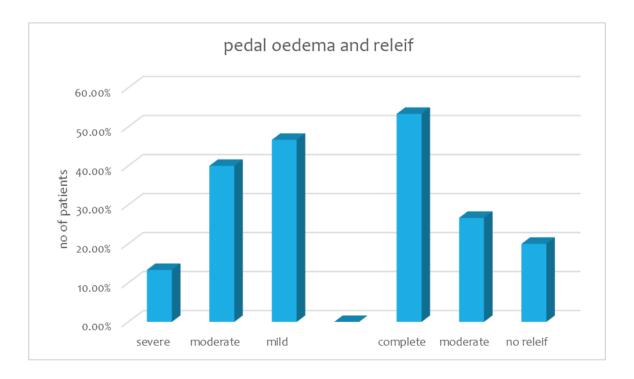
(4) Oedema

In my study 13.33% patients had severe Oedema – 40% patients had moderate Oedema 46.66% patients had mild Oedema.

Among these 53.33% patients had complete relief in Oedema. 26.66% patients had moderate relief and 20% patients had no relief.

Jirakdwaya are Katu Vipaki, Snigdha, Ushna. They play important role as Srotorodhnashak. There is accumulation of Kapha, Pitta and Rakta in Srotasas. So there is Vimargagaman of Vata. Due to Suksma srotonugami Guna of Jirak and Bhedan Prbhav of Kutaki, Dushit Dosha gets diminished and Shaman of Doshas takes place. This may be the probable reason to relieve Oedema.

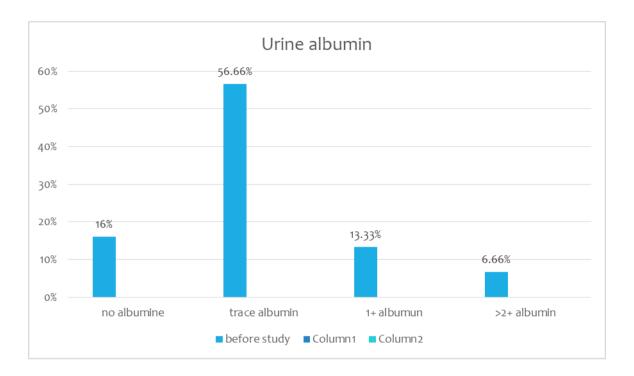
Among these 20% patients 2% patients had increased Oedema.



(5) Urine albumin

In my study there were 16.66% patients with urine albumin as nil. 56.66% patients had urine albumin as trace. 15.33% patients had urine albumin as it and 6.66% patients had 3+& 2+ urine albumin each.

After receiving *Jirakadi kwath* 86.66% patients with albuminuria showed complete relief. 13.33% patients showed moderate relief i.e. urine albumin of these patients did not decreased completely.



Jiraka by its Deepan Pachan activity diminishes Dushit Doshas and Kleda. Due to Vatashaman there is improvement in functions of Mootravaha srotas, urine albumin diminished in some cases.

(6) Blood pressure

During my study I do not found significant changes in blood pressure. Patients suffering from hypertension are treated with antihypertensive drugs in addition with *Jirakadi kwath*. According to modern science a little error may land the patient and fetus in trouble.

(7) Urine output

In my study, I kept record of urine output of I.P.D. patients. But I.P.D. patients were less the data is insufficient for obtaining results.

Statistical analysis done and conclusion made.

CONCLUSION

Jirakadi kwath contents are easily available and is simple and safe.

With the help of *Jirakadi kwath* yoga maximum patients showed relief in Oedema. Weight remained constant in some patients and maximum patients showed negligible weight gain.

Complete relief in *Anga-gourav*, *Aruchi*, and *Agnimandya* is seen. No change is observed in blood pressure in any patient. Urine output is increased in patients. Recurrences are found in few patients.

Thus *Jirakadi kwath* work to certain extent but no complete cure is seen. But the total work, itself fulfill the aims and objectives to some extent. To achieve more success by using this *Kwath* further research is necessary.

REFERENCES

- 1. Ayurvediya Prasuti tantra evam Strirog 1&2-Dr. Premvati Tiwari. Choukhamba Orientalia-1st edition.
- 2. Ayurvediya Shabd kosh 1&2 Venimadhav Shastri.
- 3. Nighantu Ratnakar
- 4. Charak Samhita Choukhamba Sanskrit sansthan 22nd edition, 1996.
- 5. Sushrutsamhita-dr.Ambikadatta Shastri-Choukhamba Sanskrit sansthan, 11th edition 1198.
- 6. Madhav nidan-Narendranath Shastri, Motilal Banarsidas. 1994.
- 7. Sharangdhar sanhita-Khemraj Shrikrushn Das prakashan
- 8. Kashyap samhita- edited by Prof.P.V.Tiwari Choukhamba Vishwabharati, 1st edition.
- 9. Methods of biostastics-Dr B.K.Mahajan Medical publishers New delhi 6th edition.
- 10. Harit Samhita—Editor –Aacharya Pandit Ramavlamb Shastri, Prachya Prakashan(first edition 1985).
- 11. Dravya gun vidnyan-Dr Deshpande, Dr.Jawalgekar, Dr.Ranade-Anmol Prakashan 1999.
- 12. Bhavprakash of Bhav Mishra Choukhamba Sanskrit Sansthan(8th edition 1993.
- 13. Williams Obstestrics-Cunnigham, Leveno, Bloom, Hauth, Rouse, Spong, 23rd edition.
- 14. Prasuti Vidnyan --Dr.Ramanath Dwivedi Chaukhamba Bharati academy, 11th edition.
- 15. Text book of Obstetrics –D.C. Dutta New Central book agency ltd, London, 7th edition.