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# A comparative clinical study to evaluate the effect of Indrayavadi Yoga and Bhoomyamalaki Choorna in the management of Asrigdara w.s.r. to Puberty Menorrhagia

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# ABSTRACT

A normal menstruation denotes a healthy state of female reproductive system. If the menstrual bleeding is abnormally excessive, prolonged and is associated with pain, it indicates some pathology. The abnormal menstrual cycle not only disturbs the general health, it also disturbs routine work schedule of the woman and her entire family. There is no direct reference of Puberty menorrhagia in classics. Puberty menorrhagia is defined as excessive bleeding occurring between menarche to 19 years of age. Anovulatory bleeding with irregular shedding of endometrium is the cause for puberty Menorrhagia which can be effectively tackled with the help of herbal drugs which contains hemostatic action. Asrigdara mainly due to vitiation of Vata and Pitta Doshas, hence the treatment should be based on use of drugs which are having predominance of Kashayarasa and Pitta-Vatashamaka properties and Stambhan action. Thus selected drugs are Indrayavadi Yoga and Bhoomvamalaki Choorna possess Vata-Pitta Shamaka and Raktastambhaka. This research work is comparative clinical study. 40 patients presenting with Pratyatma Lakshana of Asrigdara were randomly selected and divided into 2 groups of 20 patients each. Group A were given Indrayavadi Yoga and group B were given Bhoomyamalaki Choorna for a period of 2 menstrual cycle and two follow up during treatment and one follow up after treatment. After the completion of clinical trial, it was found that Bhoomyamalaki Choorna which was group B is more effective than group A. The overall effect in group A and Group B, both the groups shown excellent response, but when comparing all the parameters Bhoomyamalaki Choorna shown more significant response than Indrayavadi Yoga. Trial drug is a better remedy for Asrigdara. It has no side effect, cost effective.

Key words: Asrigdara, Puberty Menorrhagia, Indrayava, Bhoomyamalaki Choorna.

# **INTRODUCTION**

Obesity Menarche is a hallmark event in the life of adolescent girls. It marks the transition from childhood to puberty. Although mechanism triggering puberty and menarche remain uncertain, they are

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dependent on nutrition, genetics, body weight and maturation of hypothalamic-pituitary-ovarian axis. The complete maturation of the axis may take up to 2-3 year. During this time, it is common for adolescent to present with complaints of menstrual irregularities. Changes occurs during this period are physiological, physical, psychological, hormonal and metabolic in nature. Progression of this phase occurs through sequential changes described as Thelarche. Adrenarche, Peak growth spurt, Menarche and ovulation. The onset of menstruation is considered as climax of puberty and transitional step to motherhood. In 80% of cases puberty menorrhagia is caused by anovulatory cycles. There is an immaturity of the hypothalamus and inadequate positive feedback resulting in sustained high levels of estrogen.<sup>[1]</sup> Due to Pradirana (excessive excessive) of Raja (menstrual blood), it is named as Pradara and

# ISSN: 2456-3110

ORIGINAL ARTICLE Sept-Oct 2020

since it is known as Asrigdara.<sup>[2]</sup> In Ayurveda classics Raktapradara which affects woman physically and mentally. Ayurveda texts have described the variety treatment options in the management of Asrigdara. It is gynecological disorder. Asrigdara literally means excessive or acyclic bleeding from vagina during menses and intermenstrual period or cause due to riding, walking, weight lifting, trauma and day sleeping.<sup>[3]</sup> Charaka and Chakrapani says that increased Rakta get mixed with Raja (menstrual blood) thus the quantity of Raja increased.<sup>[4]</sup> Acharya Dalhana, while explaining general clinical features say that excessive and prolonged blood loss during menstruation or even scanty blood loss during intermenstrual period is known as Asrigdara.<sup>[5]</sup> Acharya Vagbhata has mentioned excessive bleeding during menstrual or intermenstrual period. Length of Rutuchakra (menstrual cycle) is usually twenty-eight to thirty days.<sup>[6]</sup> The duration of bleeding is about five days and estimated blood loss 20 to 30ml. Acharya Sushruta says that, when menstruation is in excess amount of prolonged period or even without normal period of menstruation and different from features of normal menstrual blood is called Asrigdara. According to this definition the Asrigdara is analogs to menorrhagia. So here puberty menorrhagia is defined as excessive bleeding in amount i.e. >80 ml or in duration > 7 days between menarche and 19 years of age.<sup>[7]</sup> According to classical text Hetu Sevan like excessive intake of Lavan, Amla, Katu, Vidahiaahar, Atibharvana, Divaswapna, Shoka, causes Asrigdara. So the present study is aimed for comparative study of Indrayavadi Yoga and Bhoomyamlaki Choorna in Asrigdara w.s.r. to puberty menorrhagia. Though there is no direct reference of Puberty menorrhagia in classics, there is need to adopt safe and alternate Ayurvedic medicine, as the growth and development of female is very important in pubertal age and menorrhagia. During this age may hamper physical growth as well as development. Anovulatory bleeding with irregular shedding of endometrium is the cause for puberty Menorrhagia which can be effectively tackled with the help of herbal drugs which contains hemostatic (Raktastambhak action). In this way Asrigdara mainly due to vitiation of Vata and Pitta

Dosha, hence the treatment should be based on uses of drugs which are having predominance of *Kashaya Rasa* and *Pitta-Vatashamaka* properties and *Stambhan* action.<sup>[8]</sup> So, in the present study *Indrayavadi Yoga* has been selected as trial which contain *Katu*, *Tikta* and *Kashaya Rasa* and *Sheeta Virya* which may act as *Raktastambhan*, *Dipana Karma* which correct the *Mandagni* on *Pitta Dosha*.<sup>[9]</sup> *Bhoomyamalaki Choorna* is reputed drug indicated in classical text which is used in the management of gynecological disorders.

# **AIM AND OBJECTIVES**

- 1. To evaluate the efficacy of *Indrayavadi Yoga* in the management of *Asirgdara*.
- 2. To evaluate the efficacy of *Indrayavadi Yoga* comparatively *Bhoomyamlaki Choorna* in the management of *Asrigdara*.

# **MATERIALS AND METHODS**

It is a comparative clinical study done at SDMT'S Ayurvedic Medical College, Danigond Post-Graduation Centre, and Padma Hospital and Research Centre, Terdal. In which 40 patients of *Asrigdara* were selected randomly divided into 2 groups as Group A -20 Patients and Group B - 20 Patients.

Group A was subjected to all the selected 20 patients with *Indrayavadi Yoga*. Group B was subjected to all the selected 20 patients with *Bhoomyamalaki Choorna* with *Tandulodaka*.

The progress was assessed for all the patients and regular follow-up study was done for 3-cycles.

Patients were ask to come on 1<sup>st</sup> day of each cycle, Hence we have taken 2 follow up during treatment and 1 follow up after treatment. Thus observation and investigations were carried on registration of patients.

#### Group - A

20 patients were taken for the study with trial drug *Indrayavadi Yoga* and dose was 20ml twice a day before meal from 1<sup>st</sup> day of cycle to 10<sup>th</sup> day for 2 cycle.

# ISSN: 2456-3110

#### Method of preparation of Indrayavadi Yoga

It contains two procedures. First one is preparation of the *Indrayava Choorna* and next is the preparation of the *Hima*. The required drug *Indrayava Choorna* was prepared by standard method given in *Sharangdhar Samhita*, in the form of *Sthula Choorna*, at the Pharmacy of *Rasa Shastra* and *Bhaishajya Kalpana*.

*Indrayavadi Yoga* - it is one type of *Hima Kalpana*. In this *Yoga Indrayava Choorna* and *Sharkara* is used. Here *Yogratnakara* has mentioned it is as *Indrayavadi Yoga*.<sup>[10]</sup>

# Practical method of preparation of *Indrayavadi Yoga* guided to patient

Indrayavadi yoga was prepared as per mentioned in *Yogratnakara*. 3gm (one *Nishka*) of *Indrayava Churna* was taken and added 6 times of water i.e. 20ml and kept for 12 hours and then drained the water. And in this drained water 6 gms (2 *Nishka*) of *Sharkara* is mixed. This procedure is done in twice a day following morning and night according to reference.

#### Group - B

20 patients were taken for the study with control drug *Bhoomyamalaki Churna* and dose was 3 gm twice a day before meal from 1<sup>st</sup> day of cycle to 10<sup>th</sup> day for 2 cycle.

#### Bhoomyamalaki Choorna<sup>[11]</sup>

#### Method of preparation of Bhoomyamalaki Choorna

The required drug *Bhoomyamalaki Churna* was prepared at *Rasa Shastra* and *Bhaishajya Kalpana* Department of our College in standard method given in *Sharangdhara Samhita*.

#### Anupana: Tandulodaka

# Practical method of preparation of *Tandulodaka* guided to patient

*Tandulodaka* was prepared as per *Hima Kalpana* by taking 10 gm of *Tandula* and adding 8 times water i.e. 80 ml and keeping it for 12 hour at night and then drain *Tandula* and water is used as *Tandulodaka*.

# ORIGINAL ARTICLE Sept-Oct 2020

### **Inclusion criteria**

- 1. Age 13 to 19
- Patients with irregular or prolonged cycles and excessive bleeding p/v during menstruation.
- 3. Hb % 8 grams% and above
- 4. Polymenorrhagia

### **Exclusion criteria**

- 1. K/c/o Endocrinal disorders
- 2. K/c/o Bleeding dyscrasias
- 3. K/c/o Structural abnormality in genital organs
- 4. Any other systemic illness
- 5. Married females
- 6. Diagnosed cases of PCOD
- 7. Hb< 8gm%

#### **Criteria for assessment of results**

A case record form was designed including various examinations. The efficacy of therapy was measured from subjective and objective parameters based on Ayurvedic and modern text. Reduction in amount of menstrual flow (i.e. degree in use of soiled pads/day) total stoppage of passage of clots, reduction in menstrual bleeding & period to 7 days or less, relief in associated symptoms etc.

#### **Subjective Parameters**

#### **Table 1: Duration of bleeding**

Duration	Score	Grade
Upto 5 days	0	Nil
6 days	1	Mild
7 days	2	Moderate
>7 days	3	Severe

# ISSN: 2456-3110

Table	2:	Associated	symptoms:	(Katishul,
Adhodh	arshı	ul, Angamarda)		

Katishula	Symptoms	Score	Grade
Adhodarshul Angamarda	No associated symptoms	0	nill
	Associated symptoms cured by taking rest	1	Mild
	Associated symptoms not cured by taking rest	1	Moderate
	Associated disturbing routine work	2	Severe

# Table 3: Character of bleeding

Character	Score
Clotted	1
Without clot	0

# **Objective Parameter**

# Table 4: Amount of blood loss

Amount of blood loss during menstruation	Score	Grade
1-2 pads /day	0	Nil
3-4 pads /day	1	Mild
5-6 pads/ day	2	Moderate
>6 pads /day	3	Severe

# ORIGINAL ARTICLE Sept-Oct 2020

### **Final Assessment**

For assessment, all parameters were used.

# Table 5: Overall effect

Overall effect (patient wise)	Criteria
Marked improvement	>75 % relief in signs and symptoms
Moderate Improvement	>50 % to 75 % relief in sings & symptoms
Mild improvement	>25% & 50% relief in sings & symptoms
Unchanged	Up to 25% relief in sings & symptoms

# **OBSERVATIONS**

# 1) Effect on amount of blood loss within the group

Grou p	Statist ic	В. Т	1st cycl e	2nd cycl e	A. T	d. f	Friedma n chi- squared	P- valu e
Grou p A	Media n	2. 0	2.00	1.00	1. 0	3	52.51	< 0.00 1
	Mean	2. 1	1.85	1.00	0. 9			Ŧ
Grou p B	Media n	2. 0	1.00	1.00	1. 0	3	50.373	< 0.00 1
	Mean	2. 0	1.50	0.75	0. 7			Ŧ

### Post hoc Analysis - Group A

	В.Т.	1st cycle	2nd cycle
1st cycle	0.037	NA	NA
2nd cycle	< 0.001	< 0.001	NA
А.Т.	< 0.001	< 0.001	0.346

# ISSN: 2456-3110

# ORIGINAL ARTICLE Sept-Oct 2020

# Post hoc Analysis - Group B

	В.Т.	1st cycle	2nd cycle
1st cycle	0.002	NA	NA
2nd cycle	< 0.001	< 0.001	NA
А.Т.	< 0.001	< 0.001	1

# **Comparative Analysis between the Groups**

Grou p	Median Differenc e (bef– aft)	Mean of differenc e (bef-aft)	IQR of differenc e (bef-aft)	Mann- Whitne y U statistic	P- Valu e
Group A	1.00	1.20	0	176.00	0.415
Group B	1.00	1.30	1		

# 2) Effect on the duration of bleeding within the group

Grou p	Statist ic	B.T	1st cycl e	2nd cycl e	A.T	d. f	Friedm an chi- square d	P- valu e
Grou p A	Media n	2.0 0	1.0 0	1.0 0	0.0 0	3	50.025	< 0.00 1
	Mean	1.9 5	1.4 5	0.7 5	0.5 0			-
Grou p B	Media n	1.5 0	1.0 0	0.0 0	0.0 0	3	39.646	< 0.00 1
	Mean	1.5 0	0.9 5	0.4 5	0.1 5			Ŧ

# Post hoc Analysis - Group A

	B.T.	1st cycle	2nd cycle
1st cycle	0.002	NA	NA
2nd cycle	< 0.001	< 0.001	NA
А.Т.	< 0.001	< 0.001	0.037

# Post hoc Analysis - Group B

	В.Т.	1st cycle	2nd cycle
1st cycle	0.003	NA	NA
2nd cycle	< 0.001	0.002	NA
А.Т.	< 0.001	0.001	0.02

### **Comparative Analysis between the Groups**

Grou p	Median Differenc e (bef– aft)	Mean of differenc e (bef-aft)	IQR of differenc e (bef-aft)	Mann- Whitne y U statistic	P- Valu e
Group A	1.5	1.45	1	214.5	0.683
Group B	1.0	1.35	1		

# 3) Effect on the associated symptoms within the groups

Grou p	Statist ic	B.T	1st cycl e	2nd cycl e	A.T	d. f	Friedm an chi- square d	P- valu e
Grou p A	Media n Mean	2.0 0 1.6	2.0 0 1.4	1.0	1.0 0 1.0	3	24.846	< 0.00 1
		0	0	1.1	5			
Grou p B	Media n	1.0 0	1.0 0	1.0	1.0 0	3	28.924	< 0.00 1
	Mean	1.5 5	1.1 5	0.9	0.7 5			Ŧ

# Post hoc Analysis - Group A

	В.Т.	1st cycle	2nd cycle
1st cycle	0.072	NA	NA
2nd cycle	0.002	0.020	NA
А.Т.	0.001	< 0.001	1

# ISSN: 2456-3110

# ORIGINAL ARTICLE Sept-Oct 2020

### Post hoc Analysis - Group B

	в.т.	1st cycle	2nd cycle
1st cycle	0.006	NA	NA
2nd cycle	0.001	0.037	NA
А.Т.	0.002	0.006	0.149

# **Comparative Analysis between the Groups**

Grou p	Median Differenc e (bef– aft)	Mean of differenc e (bef-aft)	IQR of differenc e (bef-aft)	Mann- Whitne y U statistic	P- Valu e
Group A	1.00	0.55	1	168	0.345
Group B	1.00	0.80	1		

# 4) Effect on Character of bleeding within the groups Group A

Before treatment	After treatment		d.f	Chi squared (McNemar)	p- value
	Without clot	With clot			
Without clot	6	0	1	9.091	0.003
With clot	11	3			

# **Group B**

Before treatment	After treatment		d.f.	Chi squared (McNemar)	p- value
	Without clot	With clot			
Without clot	9	0	1	8.1	0.004
With clot	10	1			

### **Comparative Analysis between the groups**

Grou p	Number of Patients having bleeding with clot		d.f	Chi-square test of independenc e	p- value		
	В. Т	1 <sup>st</sup> cycl e	2 <sup>nd</sup> cycl e	A. T		e	
Group A	14	11	4	3	3	1.617	0.65 6
Group B	11	5	1	1			

#### **Overall % mean reduction**

Parameter	% mean reduction	% mean reduction
	Group A	Group B
Amount of blood loss	59.65%	68.33%
Duration of bleeding	76.67%	92.71%
Associated symptoms	36.84%	48.33%
Character of bleeding	78.57%	90.91%
Overall % mean reduction	62.93%	75.07%

# DISCUSSION

The present study was conducted to compare and evaluate the effect of *Indrayavadi Yoga* and *Bhoomyamalaki Choorna* in the management of *Asrigdara* w.s.r. to puberty menorrhagia. In this work literary review of *Asrigdara*, puberty menorrhagia, *Choorna Kalpana*, *Hima Kalpana*, as described in Ayurvedic and modern medical sciences are also dealt.

# The probable mode of the action Indrayavadi Yoga

Indrayavadi Yoga contains Indrayava Churna and Sharkara. The properties of are as follows - The Indrayava having Katu Vipak, Sheeta Veerya, Tikta,

# ISSN: 2456-3110

# ORIGINAL ARTICLE Sept-Oct 2020

Kashaya Rasatmaka properties like Tridoshahara, Deepana, Grahi, Raktastambhana.

**Rasa** - Indrayavadi Yoga has predominantly Tikta Kashaya. Kashaya Rasa possess Sthambhan Grahi, Sleshmahara and Raktapittahara property and thus it helps reduce the duration and amount of bleeding. Tiktarasa is Pittakapha Shamaka and it act like Dhatu Shodhana properties. It is also having Raktapittahara property, so it helps to reduce the duration and amount of bleeding in Asrigdara.

*Guna* - *Laghuguna* - have *srotoshodhana* property, does *Raktshodhana*.

*Rukshaguna* - possess *Sthambhana* and *shodhana* property, so reduce the duration and amount of bleeding.

*Virya* - *Sheeta* which is *Raktapittashamak* and *Sthambhan* properties which helps in relieving symptoms of *Asrigdara*.

*Vipaka* - *Katu Vipaka* which helps in relieving symptoms by *Laghu* and *Kaphapitta Shamaka Guna*. So it helps in *Asrigdara*.

*Karma* - The drug having properties like *Tridoshashamak, Raktahara, Pradarhara, Grahisthambhaka, Deepana.* All these properties helps in reducing symptoms of *Asrigdara*.

*Sharkara* - It is *Sheetavirya, Madhura Rasa, Madhurvipaka, Laghuguna,* so it also helps in *Asriqdara*.

Indrayavadi Yoga has antispasmodic activity. In this disease Modern science use non-steroidal antiinflammatory drugs which block myometrial PGE2 receptors and maintain prostaglandin and help to reduce menstrual blood so it helped in reduces Asrigdara symptoms. It helps in reducing bleeding but it does not regulize the menstrual cycle. It has also astringent property. It also noted that Indrayava Yoga was well tolerated by the patients. In this way this Indrayavadi Yoga act by hemostatic, restorative and specific Prabhava etc. The probable mode of the action of *Bhumyamalaki Choorna* 

It contain *Bhoomyamalaki Moola Choorna* and *Tandulodaka* as *Anupana*.

**Rasa** - Bhoomyamalaki Choorna has predominantly Madhur, Tikta, Kashaya. Madhura Rasa possess Vatapitta Shamaka property so it helps in deduction of amount of blood loss and reduction in Angamarda etc. Kashaya Rasa possess Sthambhan Grahi, Sleshmahara and Raktapittahara property and thus it helps reduce the duration and amount of bleeding. Tiktarasa is Pittakaphshamak and it act like Dhatushodhana properties. It is also having Raktapittahara property so it helps to reduce the duration and amount of bleeding in Asrigdara.

*Guna - Laghuguna-* have *Srotoshodhana* property-does *Raktshodhana*.

*Rukshaguna* - possess *Sthambhana* and *Shodhana* property - so reduce the duration and amount of bleeding.

Virya - Sheeta is Raktapitta Shamak and Sthambhan properties which helps in relieving symptoms of Asrigdara

*Vipaka* - *Madhur Vipaka* which helps in relieving symptoms by *Laghu* and *Vatapittashamakguna*. So it helps in *Asrigdara*.

*Karma* - the drug having properties like *Pittahara, Raktahara, Pradarhara, Grahisthambhaka, Deepana.* All these properties helps in reducing symptoms of *Asrigdara.* 

In this way all the properties of *Bhoomyamalaki Churna* acted on uterine blood vessles and not only that, it has *Deepana* and *Pachana* property correct the metabolic disorders of body and balance hormonal disturbances. General health of patients improve because it also has *Raktashodhak* quality. *Bhoomyamalaki* has a astringent property, which gives tonicity to the uterine muscles.

Here Tandulodaka is Sheetavirya Madhura Vipaka, Madhura Rasa so helped in Asrigdara.

# ISSN: 2456-3110

# **ORIGINAL ARTICLE** Sept-Oct 2020

In overall effect of treatment of *Indrayavadi Yoga* and *Bhoomyamalaki Churna* in both groups:

In group A, 6 patients (30%) maximum improvement, 8 patients (40%) were moderately improved while 6 patients (30%) were seen with mild improvement.

In group B, 8 patients (40%) maximum improvement, 11 patients (55%) were moderately improved while 1 patient (5%) was seen with mild improvement.

Thus total result in *Bhoomyamalaki Choorna* is 75.07% and in *Indrayavadi Yoga* is 62.93%.

#### CONCLUSION

Aim of present study to evaluate the efficacy of Indrayavadi Yoga comparatively Bhoomyamalaki Choorna in the management of Asrigdara. Based on above clinical statistical data it may be concluded as follows: in Group A, Indrayavadi Yoga and in Group B, Bhoomyamalaki Choorna both are having significant effect on the management on the Asrigdara. There was comparatively more improvement in amount of blood loss, duration of bleeding, associated symptoms and character of bleeding in the treated group B as compaired to group A. at the end of this clinical trial it was found that both groups are efficient in the management of Asrigdara, but while considering statistical analysis Bhoomyamalaki Choorna is more effective than Indrayavadi Yoga. Indrayavadi Yoga is well tolerated by the patient.

# REFERENCES

- Hiralalkonar; D.C. Duttas textbook of Gynaecology, Jaypee, 6<sup>th</sup> edition; (2013); (page no. 48, 80, and 178)
- Dr. Kashinath shashtri and Priyavat Sharma; Charaka Samhita; Chaukhamba Sanskrit series office Varanasi; reprint 2005. Ch. Chi 30/209, page no.776.
- BhishagratnaPandit Sri Brahma Sankaramisra; Bhavaprakashof Sri Bhavamishra; Chaukhamba Sanskrit Sansthan, Varanasi; part 2; 9<sup>th</sup> edition 2005. bha. Chi. 68/3 page no.757.

- 4. Dr. Kashinath Shashtri and Priyavat Sharma; Charak Samhita; Chaukhamba Sanskrit series office Varanasi; reprint 2005. ch. Chi 30/204, page no. 180, 181.
- Prof. K.R. Shrikanthamurthy; Sushruta Samhita text English translation volume 1; Chaukhamba Orientalia Varanasi; edition 3<sup>rd</sup> 2007. su. Sha. 2/18, page no.21.
- Atridevgupta, Astanga Sangraha with hindi commentary, volume I, published by Chaukhamba Krishnadas academy, Varanasi, reprint in 2005, sha. Tika6
- Kaviraj Ambikadutta Shashtri; Sushruta Samhita; part 1; Chaukhamba Sanskrit Sansthana Varanasi; edition reprint, 2014, Su. Chi. 7/38, page no.57.
- Prof. Premavati Tiwari, Ayurvediya Striroga, part 2, Chaukhamba Orientaliya, Varanasi, chapter 2, page no.174,175.
- Acharya P. V. Sharma Dravyaguna Vijnyan volume 2, Chaukhamba Bharati Academy, Varanasi, chapter- 5 page no.463.
- Yogratnakara with Vidyotini Hindi commentary by Vaidya Shastri, edited by Bhishag Ratna Shankara Shastri, Chaukhamba Sanskrit Samsthan, Varanasi,5<sup>th</sup> edition 1933,PN-400.
- Yogratnakara with Vidyotini Hindi commentary by Vaidya Shastri, edited by Bhishag Ratna Shankara Shastri, Chaukhamba Sanskrit Samsthan, Varanasi, 5<sup>th</sup> edition 1933PN-400.

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