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Role of *Bala* Oil for *Matrabasti* and *Yonipichu* in achieving Normal Vaginal Delivery: An Overview

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ABSTRACT

Normal vaginal delivery or *Sukhaprasava* is a natural way of giving birth to a healthy fetus by a healthy mother without any external medical or surgical intervention. This is the ultimate aim of every pregnancy. But now a day the rate of unnatural child birth over natural child birth is going to rise. But there are many demerits of unnatural deliveries like risk of anesthesia drugs, wound infection, greater blood loss, increase hospital stay with longer recovery period, delayed lactation which affects bond formation between mother and newborn, many respiratory problems in newborn as born unnaturally and many more. For promoting natural vaginal deliveries some intervention is well accepted before the onset of labor which having no any negative impact over mother and her baby. Ayurveda provides a regime for having normal vaginal delivery or *Sukhaprasava* during ninth month of gestation. It includes *Matrabasti* and *Yonipichu* with oil medicated with sweetened drug or *madhuraushadha*. Among the list *madhuraushadha Bala (Sida cordifolia)* can be selected to prepare medicated oil for *Matrabasti* and *Yonipichu*. As this drug is also mentioned under *balya*, *brimhaniya* and *prajasthanamahakashaya* thus provide strength to uterus at the time to labor. *Bala* is also *ojovardhaka* in nature thus help the parturient women to tolerate stress and pain at the time of labor. *Bala* having many more such qualities which makes it most preferable *ushadha* to be used during ninth month regime for *Matrabasti* and *Yonipichu* which is further described under this paper.

Key Words: Normal Vaginal Delivery, *Sukhaprasava*, *Matrabasti*, *Yonipichu*, *Bala*, *Sida cordifolia*

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INTRODUCTION

Every expectant woman desires to have an easy pregnancy and a smooth normal vaginal delivery. But everyone is not able to have a normal childbirth since no one has control over the things that can happen in the labor room. But now a day, normal delivery is being more encouraged and moreover, mothers mainly wish to go for it. Normal childbirth is possible if a *Garbhini* takes

right care of her health during pregnancy especially during last months of gestation. The perfect regime during pregnancy helps to ensure a natural vaginal delivery or *Sukhaprasava*.

In Ayurveda Acharyas has mentioned about a unique concept of *Garbhini Paricharya* which is very important to maintain health of a pregnant lady. It is very important for every *Garbhini* to follow this *Paricharya* right from the conception

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till delivery. It includes all aspects of care of *Garbhini* like *Ahara* (diet), *Vihara* (yoga/exercise/activity), *Pathya* (do's), *Apathya* (don'ts), meditation, etc.

During ninth month of *Garbhini Paricharya*, Acharya Charaka mentioned that *Garbhini* should be treated with *Anuvasana Basti* and *Yonipichu* of oil prepared with *madhura aushadha* which lubricate *Garbhasthana* along with genital tract.

नवमेतुखल्वेनांमासेमधुरौषधसिद्धेनतैलेनानुवासयेत्।

अतश्चैवास्यास्तैलात्पिचुयोनौप्रणयेद्गर्भस्थानमार्गस्नेहनार्थम्॥(Cha. Sh. 8 /32)

Acharya Charakadescribed *Bala* under *madhuraskandhas* and *prajasthapana*, *balya* and *brimhaniyamahakashaya*. *Bala* is considered as *madhura rasa*, *madhura vipaka*,

snigdha and rejuvenative (*rasayana*)¹ in properties. Acharya Sushruta also has the same view regarding the properties of *Bala*. On Pharmacological screening, it is found to have some important fatty acids and other chemical constituent which works on cervical matrix and contractile system of myometrium leads to smooth natural vaginal delivery or *Sukhaprasava*

MATERIALS AND METHODS

Literary references are collected from Ayurveda Samhita, modern literatures, research journals available on online research portals and explored to frame an overview.

Table 1 Contents of *Bala* oil

Sr. no.	Ingredient	Scientific Name	Useful Part
1.	<i>Bala</i>	<i>Sida cordifolia</i> Linn.	Root/ <i>Panchanga</i>
2.	<i>Tila oil</i>	<i>Sesamum indicum</i> Linn.	Seed

Method of preparation of *Bala* oil:

As per the concept of *Taila paka vidhi* mentioned in Sharangdhara Samhita², *kalka*, *sneha* and *kwatha* should be taken in ratio of 1:4:16.

Step – 1: *Kashaya* preparation

Coarse powder of root / *panchanga* of *Bala* should be boiled with water (water should be sixteen times the quantity of oil as mentioned in classics) until one fourth of the volume of decoction remained in the container. This *kashaya* should be four times the volume of oil.

Step – 2: *Kalka* preparation

Coarse powder of *Bala* root / *panchanga* should take as one part and mixed with small quantity of

water to form a paste then soaked it for one day & night for the formation of *kalka*.

Step – 3: *Taila* preparation

Sesame oil should mildly be heated in a large vessel and prepared *Bala kashaya* and *Bala kalka dravya* mixed with it. Boiling and stirring of this solution should continue in open vessel. At a stage, froth³ starts to come out indicates that the correct *Tailapaka lakshana* appears. *Madhyama paka* of oil was achieved for *Matrabasti* and *Yonipichu* as *madhyama paka* is mentioned as best *paka* for *Sarvakarma* by Acharya Sharangdhara⁴ and best for *basti* by Acharya Charaka⁵. Then this oil was filtered and allowed to cool down on

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normal room temperature then poured and stored container for further use.

it into air tight steel

Table 2 Rasa Panchaka of *Bala* oil

S. no.	Dravyas	Rasa	Guna	Virya	Vipaka	Doshghanta
1.	<i>Bala</i>	Madura, Tikta	Laghu, Snigdha, Pichilla	Sheeta	Madhura	Vata-Pita Shamaka
2.	<i>Tila</i>	Madura, Katu, Tikta, Kashaya	Guru, Snigdha, Vyavayi, Sukshma	Ushna	Madhura	Vata Shamaka

Table 3 Analysis of *Bala* oil

S. no.	Dravyas	Chemical constituent	Karma	Pharmacological action
1.	<i>Bala</i>	Ephedrine, saponins, beta-sitosterol, vasicinol, vasicinine, vasicinone, hyphorine fatty acids like linoleic acid, coronaric acid, malvalic acid, sterculia acid, palmitic acid, stearic acid etc.	<i>Prajasthapana, Balya, Brihgana, Vrushya, Pushtikar, Dhatu-Virya-Oja-Aayu-Kantivardhaka, Jawaraghana, Shatanashana</i>	Anti-inflammatory, analgesic, antipyretic, hepatoprotective, neuroprotective, antiulcerogenic, antihypertensive, hypoglycemic, antidiabetic, laxative, diuretic, antimicrobial, antioxidant
2.	<i>Tila</i>	fatty oils, sesamin, sesamol, sesamol (3, 4-methylenedioxyphenol), phytoestrogens, lignans, vitamin E, B-complex (especially niacin), phytosterols, proteins, sucrose, saccharides, sesamose etc.	<i>Garbhashayashodhana, Vrishya, Yonishulhara, Yonishodhana, Prasavashulhara, Pradaranashaka</i>	antioxidant, hepatoprotective, hypotensive, free radical scavenging activity, antipyretic, anti-inflammatory, anti-microbial, wound healing property

Evaluation of Therapeutic action of *Bala*

Anti-inflammatory activity:

In an animal study it was found that extract of *Bala* manifested a remarkable suppression of carrageenin induced paw edema⁶. Other animal study on rat also demonstrated that when *Bala* consuming rat exposed to heat they had better heat tolerance so proved that the extract of root of *Bala* can increase the pain tolerance capacity and also having anti-inflammatory effect.⁷

Analgesic activity:

A study showed that extract of root and aerial parts of *Bala* manifested satisfactory central as well as peripheral analgesic effect⁸. An animal experiment also showed the similar effect⁹.

Hepatoprotective activity:

A study showed that fumaric acid extract of *Bala* act as hepato-protective¹⁰. Another animal study

showed its anti-hepato-toxic activities predominantly by its methanolic extract¹¹.

Antibacterial, Antifungal activities:

Antibacterial activity of *Bala* extract was reported against *Escherichia* as well as *Pseudomonas*¹². The extract of *Bala* also exhibited a higher suppression effect against *Enterobacter*, *Mycobacterium* and other bacterial species. In a study Antifungal potential of leaf extract of *Bala* was reported against *Candida albicans* and *Cryptococcus neoformans* infection¹³.

Antihypertensive activity:

A study showed that vasicine, an alkaloid of *Bala* was evaluated to produce hypotensive as well as bradycardial effect¹⁴. Another study also showed that its Nitric oxide component also incorporate antihypertensive property¹⁵.

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Wound healing activity:

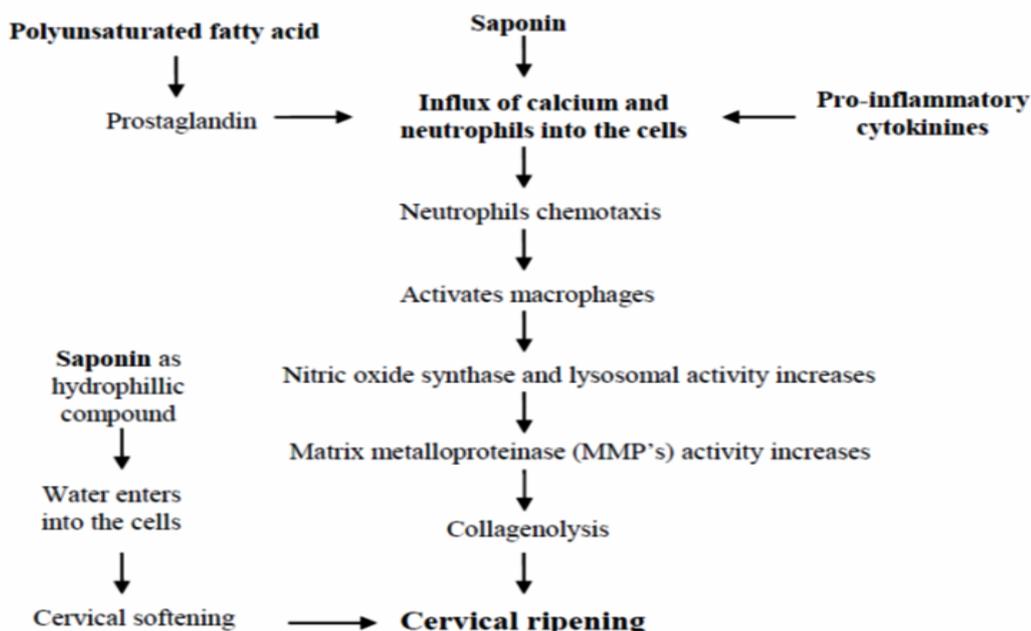
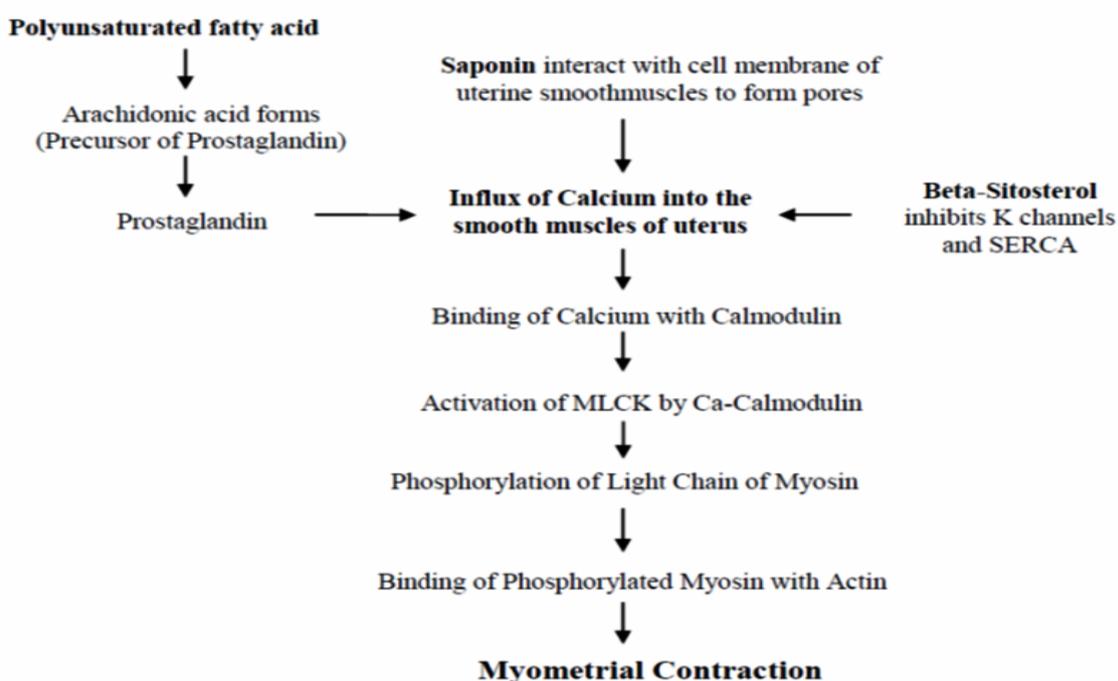
An animal study showed that the *Bala* ointment manifested remarkable healing in excision, incision and burn wound¹⁶.

Laxative activity:

Constipation is common during 9th month of

pregnancy and good bowel clearance during 9th month and labor helps in easy vaginal delivery. So the laxative property of *Bala* leads to effective bowel clearance and will also reduces the use of soap water enema during first stage of labor.

Probable mode of action of *Bala* on cervix and contractile system of myometrium



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DISCUSSION

Bala siddha oil is having *guru*, *snigdha*, *balya* and *brimhaniya* qualities that tend to increase muscle tone & contractility of uterine muscle while applied through vaginal and anal route¹⁷. Thus conduct good and satisfactory contractions during *Prasava*.

Bala have properties of *madhura rasa*, *madhuravipaka*, *snigdha guna*, so it diminishes *Vatadosha*. As oil is applied vaginally and anally, it mainly works on *Apana Vayu* and *Apana Vayu* is considered as *Prasutimaruta*. It also works on *Vyana Vayu* which is necessary for proper rhythmic contraction of myometrium. Due to proper function of *Apana Vayu* and *Vyana Vayu*, easy normal delivery may achieve without any difficulty.

As *Vayu* is main authoritative *Dosha* for pain and *Bala* having stronger action on *Apana Vayu* and also having *Balya* and *Ojovardhaka* qualities, it acts over pain threshold capacity¹⁸. So *Bala* helps to increase pain threshold of parturient women that tends good bear down efforts and also diminishes the consequences of after pain.

Bala is having anti-inflammatory property and when it is applied as *Yonipichu* and *Matrabasti* through vaginal or anal route, it prevents vaginal tissue, cervical tissue, perineum and uterus from inflammations during and after delivery that reduces the risk of pelvic cellulitis. It also prevents urinary system from inflammation so micturition will not be affected after delivery.

Good analgesic property (~~Kanth VR and Diman PV, 1999~~) of *Bala* can help pregnant women in good bearing down efforts during second stage of labor. This property can also prevent after pains during puerperium.

Due to antibacterial and antifungal activity (~~Kalaiarasan S et al, 2011~~), *Bala* maintains the natural vaginal flora and prevents it from infections so as prevent premature rupture of membranes as infection is its main cause. It might help in the prevention of infection during labor thus prevent urinary tract infection (cystitis, pyelonephritis). In post partum period it also prevents puerperal sepsis. It also limits the consumptions of antibiotics in post natal period.

Bala having antihypertensive effect and when its oil was administered in *Basti* form this it enhances the antihypertensive effect of *Basti*. (~~Silveira AL et al, 2003~~). This antihypertensive effect can prevent all hypertension related complications during and after labor like pre-eclampsia, post-partum hemorrhage, shock etc. It also reduces the use of antihypertensive medications during labor. Wound healing activity (~~Pawar et al, 2013~~) of *Bala* plays a role in quick healing of cervical tears and vaginal lacerations occurs during labor by increasing tensile strength.

Constipation is common during 9th month of pregnancy and good bowel clearance during 9th month and labor helps in easy vaginal delivery. So the laxative property of *Bala* leads to effective bowel clearance and will also reduce the use of soap water enema during first stage of labor.

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Conclusion

As per the therapeutic action of *Bala* and its probable mode of action on cervix and contractile system of myometrium, it is concluded that application of *Matrabasti* and *Yonipichu* with the oil prepared using *Bala* during ninth month of *Garbhini Paricharya* is found to be effective in achieving natural vaginal delivery of a healthy new born from a healthy mother.

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