

## **UTTARBASTI (A UNIQUE GYNAECOLOGICAL PROCEDURE IN AYURVEDA)- A CRITICAL REVIEW**

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### **ABSTRACT**

Ayurveda is unique science of life. There are many local procedures described in Ayurveda specially for the women. In *Ayurvedic Gynaecology Sthanik Chikitsa* (Local therapies) are the specialized treatment procedures. These procedures basically deal with the disorders of *Tryavarta Yoni* (Three coverings of Vagina). These includes mainly *Yonidhavan* (Cleaning of Vagina), *Uttar-Basti* (Insertion of Medicated oil, decoction into Intra Uterine Cavity through Vagina), *Yoni-Pichudharan* (Insertion of Tampons soaked in medicinal oil or liquid), *Yoni-Dhupan* (Vaginal Fumigation), *Yoni-Lepan* (Vaginal painting), *Yonivarti* (Vaginal Suppository), *Yoni-Puran* (Vaginal Packing), *Yoni Parishek* (vaginal wash), *PindaChikitsa* etc. *Uttarbasti* is one of them. It is mentioned for the genito-urinary disorders of both, the males and the females. It directly works locally. This review is mainly dealt with indication, contraindication, procedure, effect of *Uttar basti* in female.

**Key words:** *Sthanikachikitsa, Uttar basti.*

### **INTRODUCTION**

Some *Sthanik Chikitsa* (Local therapies) in *Ayurvedic Gynaecology* is prescribed by Ancient *Acharyas*. Among them *Uttarbasti* is an important and a unique Ayurvedic procedure, which is defined in Ayurvedic classics very descriptively. It is mentioned for the genito-urinary disorders of both, the males and the fe-

males. Among them infertility is the major issue in today's era. For that various causes are responsible like tubal blockage, anovulation, PCOS, endometrial defect like less endometrial thickness or endometriosis etc. *Uttarbasti* is proven effective in all above cases. Hence, its elaborative classical description along with in-

terpretation on modern tools is made here. There are two routes for administration of *Basti* described in classics, viz. *Basti* (through anal canal) and *Uttarbasti* (through urogenital tract). The *Bastiyantara* is also used to inject the medicines through urinary and vaginal passage, for which the term *Uttarbasti* is given.<sup>1</sup>

The *Uttarbasti* deals with both, males and females. But the following discussion is carried out taking females in view only.

## 1. CLASSICAL UTTARBASTI

**1.1. Definition:** There are three reasons behind this terminology –

1. It should be given after *Niruhabasti* (*Niruhat Uttarena*)<sup>2</sup> (*Niruhat Uttaro Yasmat Tasmatt Uttarsamgyakah*)<sup>3</sup>
2. It is given through uro-genital passage (*Uttarena VaMargena Deeyat*)<sup>4</sup>, (*Uttarmargadeeyamantaya*)<sup>5</sup>
3. It is superior in qualities (*Shreshthagunatva*)

## 1.2. Indications of Uttarbasti<sup>6,7,8</sup>

- For conception (*GarbhamYonih Tada*)
- To pacify *Vata* (*JiteVayuh*)
- For urinary bladder disease (*Bastijeshu Vikarshu*)
- Diseases caused by prolapse (*Yonivibhramshajeshu Cha*)
- Severe Pelvic pain (*YonishuleshuTivreshu*)
- Gynecological disorders (*Yonivyapad, Yonivyadhim*)
- Menometrorrhagia(*Asrigdara*)
- Retention of urine (*AprasravatiMutre, Mutraghata*)
- Incontinence of urine (*BindumBindumSravatyapi*)
- Menstrual disorders (*DushtamShonitam*)
- Menorrhagia (*Pushpodrekam*)

- Pathological amenorrhoea (*TasyaNasham*)
- Dysmenorrhoea (*Kashtam*)
- Urinary diseases (*Mutradosham*)
- Retention of placenta (*SamsathatimApara*)
- Urinary calculi (*SharkaraAshmarim Cha*)
- Groin pain (*Vamkshana Shula*)
- For all reproductive tract disorders (*Rogeshu-Narinam Yoni GarbhashayeshuCha*)

## 1.3. Contraindications

- Not described in classics
- The only contraindication given in classics is the genital tract in girls (*BalanamApatya Margena Diyat Iva*)<sup>9</sup>

## 1.4. Time of administration<sup>10,11</sup>

*Uttarbasti* should be given during *Ritukala* (just after menstrual period) after purifying the body with two or three *AsthapanaBasti*, because *Garbhashaya* (*Garbhashaiyaor Yoni*)<sup>12</sup> is ready to absorb *Sneha* this time. Acharya Charaka and Vagbhata have given very accurate explanation for the selection of proper time by saying that during menstruation, vaginal and uterine orifices are open (*Apaavrita yoni*), so medicine is taken in better way.

## 1.5. Dose

### 1.5.1. Dose of Snehana type of Uttarbasti<sup>13,14</sup>

Acharya Sushruta has given the quantity of *Snehana* (oleaginous) type of *Uttarbasti* for urinary tract as one *Prasrita* (palm of outstretched hand and hollowed it as to hold liquid, filled up to the *Svangulimula* i.e. base of fingers). For cleansing (*Vishodhana*) of uterus, it is double i.e. two *Prasrita*. Acharya has given this dose for the severe diseases and strong patients (*Paramvarga*) and has left the decision of fixing individual dose on the wisdom of *Shalya Chikitsaka* (*BuddhiVikalpitam*). While commenting on the

same, Acharya Dalhana again clarifies that the quantity maybe half or less as decided by the physician with his judgment, whether the strength of disease or the patient is half (*Madhyam*) or less (*Hina*).<sup>15</sup>

Acharya Chakrapani has followed Acharya Sushruta and repeated the same.

Acharya Sharangdhara<sup>16</sup> and Bhava Mishra<sup>17</sup> has considered this dose as:

- In adult woman: two *Pala* (96gm) in genital tract and one *Pala* (48 gm) in urinary tract
- In premature girl: two *Karsha* (24 gm) Acharya Vagbhata<sup>18,19</sup> has mentioned it as:
- For adult woman: one *Prakumcha* (Pala=48gm)
- For girl: 1 *Shukti* (24 gm)

Afore said *Matra* is *Madhyama* as per Acharya Vagbhata. It should be increased gradually by half and one *Karsha* in second and third Uttarbasti respectively.

### 1.5.2. Dose for Niruha Uttarbasti<sup>20</sup>

If cleansing is needed by Uttarbasti

Age	Passage	Length	Circumference of nozzle	Size of lumen	Karnika
Girl	Urinary	10 finger width	Flower stalk of <i>Malti</i>	Size of a mustard seed	1 finger width
Adult women	Urinary	10 finger width	Size of urethral meatus	Size of Mudga seed	2 finger Width
Adult women	Vaginal	10 finger width	Index finger	Size of a Mudga seed	4 finger width

### 1.8.1.2. Uttarbasti Putaka

- Not mentioned specifically in classics
- Can be made on the same pattern as mentioned for *Guda* (anal) *Basti*, but small in size than the *gudabasti*

### 1.8.2. Position (Sthiti)

The woman should be placed in supine position with flexed thighs and elevated knees (*Uttanaya Shayanaya Samyak Samkochya Sakthini*<sup>31</sup> *Urdhvajanve Striye Dadyat Uttanaye*<sup>32</sup>)

- For genital tract of reproductive age group of women (Nullipara or parous) –2 Prasrita

- For urinary tract of reproductive age and girls of less than 12 years –1 Prasrita

### 1.6. Duration

In day -night, total 2, 3 or 4 Basti should be given and the procedure should be continued for three nights with gradual increase in the quantity of oleaginous substance.<sup>21</sup>

### 1.7. Interval<sup>22</sup>

After giving rest for 3 days (*Trayahmeva Cha Vishramya*), the procedure should be repeated for another 3 days.

## 1.8. METHOD OF UTTARBASTI

### 1.8.1. Yantra (Instruments): Pushpanetra and Bastiputaka

**1.8.1.1. Pushpa Netra:** The *Netra* or nozzle of *Uttarbasti* is termed as *Pushpanetra*<sup>23</sup>

- Should be made of silver, gold, brass, bell – metal, tin<sup>24,25,,26</sup>
- Shape –tapering like cow’s tail<sup>27</sup>
- Size<sup>28,29,30</sup>

### 1.8.3. Procedure (Vidhi)

The nozzle should be inserted in urinary or vaginal passage slowly with steady hands, following the direction of passage.<sup>33,34,35,36</sup>

### 1.8.4. Pratyavartana (Returning)

- *Pratyavartana* of *Snehanais* considered essential for *Uttarbasti*,
- Acharya Charakahas mentioned administration of *Pippalyadi Varti* (suppositories), if *Basti* does not return.<sup>37</sup>

- Acharya Dalhana has given a very specific description for the *Pratyavartana* of *Sneha*. These measures are –*Yoni Varti*, *GudaVarti*, *Sphik –Tadana* and *Eshana*etc.<sup>38</sup>

## 2. UTTARBASTI IN PRACTICE

Now a day, *Uttarbasti* told by classics is being practiced after making several modifications. From its indications to contraindications, instruments to method, everything has been modified to a great extent. And only *Snehana* type of *Uttarbasti* is in practice.

### 2.1. Method

#### 2.1.1. Poorva Karma

- *Yoni Prakshalana* – by some *Kwatha* of antiseptic property like *Panchvalkalakwatha*, *triphalakwatha* etc.,
- *Snehana* of Abdomen, back, thigh and legs with any *Vatashamaka Taila*
- *Swedana* especially *NadiSweda* on back and lower abdomen

#### 2.1.2. Pradhana Karma

#### Instruments:

The instruments used for the *Uttarbasti* are Posterior Vaginal Speculum, Anterior Vaginal Wall retractor, Allis' forceps and *Uttarbastic* annula fitted with disposable syringe. Instruments and oil are autoclaved and procedure is done in operation theatre.

#### Procedure:

The patient is taken in dorsal lithotomy position, cleaning with antiseptic solution is done. Cervix is visualised with Sim's speculum and Anterior vaginal wall retractor. Cervical tip is caught with Vulsellum or Allis' forcep. Then the medicated oil is inserted with the help of *Uttarbasti* Cannula-very slowly with steady

hand, while anterior lip of cervix is held with Allis' forceps and the patient is kept in head low position at least for 20 to 30 min in theatre. Instruments are removed.

#### 2.1.3. Pashchat Karma

- She is kept in head low position for at least 2 hours for better absorption of drug from vagina and to prevent any vasovagal shock.
- Abdominal hot fomentation with hot water bag is preferred.
- Light diet

### 2.2. Indications

Common indication of *Uttarbasti* practiced now-a-days is *Vandhyatva* (infertility). Very few doctors are administering it for irregular cycles and *Kashtartava* also.

### 2.3. Contraindications

Contraindications being considered these days can be divided into two categories –

- Absolute contraindications: Pregnancy and in-situ contraceptive device, Virgin patient
- Relative contraindications: Vaginitis, Cervicitis, Endometritis, Vesicovaginal Fistula Endometriosis and Carcinoma

## 3. PROBABLE MODE OF ACTION OF UTTARBASTI

Mode of action of *Uttarbasti* lies not only in the *Pradhana Karma* but also in its *Purva Karma*.

### 3.1. Mode of action of Purva Karma in Uttarbasti:

*Snehana* and *Swedana* are very important procedures and are used as both, the *Pradhana Karma* as well as *Purva Karma* of several *Panchakarma* procedures. *Snehana* and *Swedana* are very efficient and multi-faceted procedures, but the current discussion deals with its efficacy as an adjuvant to *Uttarbasti* only.

Though, classics have not specifically emphasized much upon *Snehana* and *Swedana* before *Uttarbasti*, but this approach seems to be genuine and appropriate.

*Uttarbasti* deals mainly with the *ApanaVayu*, as the nearby situated organs are its seat.

*Snehana* and *Swedana* prior to *Uttarbasti* do its *Anulomana* and thus, *Uttarbasti* becomes more efficacious. Besides this, chances of any type of complication are also less, if *Vatanulomana* done prior to procedure. Other than it, *Snehana* and *Swedana* just prior to *Uttarbasti* relax the Abdominal muscles. Good relaxation is very important for *Uttarbasti*, so that uterus does not get irritated by the instillation of medicine from outside. If it is not relaxed adequately, it may contract at once and may not retain any of the medicine. *Snehana* and *Swedana* before *Uttarbasti* also lessen the pain during and after procedure.

*Yoni Prakshalana* done prior to *Uttarbasti* with *Kwatha* of antiseptic property nullifies the possibility of any type of infection as a complication.

### **3.2. Mode of action of Pradhana Karma in Uttarbasti:**

Mode of action of *Uttarbasti* can be understood in two ways –

#### **3.2.1. Local effect of Uttarbasti**

Effect of *Uttarbasti* will depend on various points; like method, instrument, drug used etc. If medicine is put in cervical canal, it may act more on the cervical factors. For the factors like cervical stenosis, a *Katu –UshnaTaila* based medication can be more useful, while for increasing the secretion of mucous from cervical

glands, a nutritive and *Madhura–ShitaGhrita* based medicine will be more efficacious.

In the same way, drug selection for ovulatory and tubal factor will be totally different from each other. On ovary, the effect of drug will be after absorption and then by stimulating the Hypothalamo-Pituitary-Ovarian axis, while in tubal block, *Uttarbasti* acts locally. In ovulation, a drug with *Snehana* property can be good while for tubal block, a drug with *Lekhana Karma* will be better.

Advantage of intra uterine instillation of oil is proved in modern science also as it is said that approximately 30% of the patients who have normal hysterosal pingography, conceive over the following 6 months and it were thought to be a characteristic of only oil-based contrast medium.<sup>39</sup> Apart from this, *Uttarbasti* may also stimulate certain receptors in the endo-metrium, leading to correction of all the physiological processes of reproductive system. It may also help in rejuvenation of endometrium. Thus, mode of action of *Uttarbasti* can be understood in following ways –

- Intra vaginal *Uttarbasti* helps in removing the infections, if given with antiseptic drugs
- Intra vaginal *Uttarbasti* may also facilitate the absorption of drug, as posterior fornix has a very rich blood supply and it may also act as reservoir of drug, when patient is lying down in head low position after *Uttarbasti*
- Intra cervical *Uttarbasti* with oil based drug helps to remove the cervical stenosis and to restore the function of cervix in conception and helps to treat dysmenorrhoea caused by stenosis

- Intra cervical *Uttarbasti* with *Bhrimhana* drugs may stimulate the secretion of cervical mucus leading to ascent of sperms in uterine cavity
- Intra uterine *Uttarbasti* with *Ghrita* based *Snehana* and *Brimhana* drugs helps in rejuvenation of endometrium, especially where apart from regular ovulation, poor endometrium is causing infertility or scanty menstruation
- In cases of menorrhagia due to hyperplastic endometrium, intra uterine *Uttarbasti* with *Lekhana Dravyas* may help
- For tubal factor of infertility, a high intra uterine *Uttarbasti* with *Lekhana Dravyas* acts in two ways. It removes the blockage of tubal lumen by directly acting on obstruction mechanically and restores the normal function of tubal cilia by stimulating it. As endometrial covering is continuous in the tubes too, its scraping and regeneration also leads to normalization of tubal functions.

### 3.2.2 Systemic effect of *Uttarbasti* after absorption

It seems that Ayurveda had a clear distinguishing approach between oral and parenteral route of drug administration from the very beginning. Thus, Acharyas have described the administration of drug from almost all the open organs and have considered the *Basti* (rectal administration) the most efficacious. On the same pattern, *Uttarbasti* can also act after getting absorbed from rich blood circulation of uterus and posterior fornix. Then, it may act on whole body system and can act as a parenteral route. On ovulatory factor and certain other gynaecological disorders related to *Vandhyatva*, it may act by stimulating some neuro-endocrine pathways after getting absorbed.

Systemic effect of *Uttarbastican* also be understood with the help of system biology concept.<sup>40</sup> System biology is the latest concept emerging and getting accepted in modern science. This concept believes in the holistic approach similar to as advocated in Ayurveda from the very beginning. It considers the need of a standard shift of modern science from reductionist to holistic. It believes that all the bodily systems and organs are interconnected at molecular level. And any change in any organ on molecular level will certainly change the other.

This concept actually is the first step of modern science towards the concept of *Mahabhuta* and *Tridosha*. Ayurveda also considers whole the body as one unit on *Mahabhautikalevel*. Still, *Tridosha* and *Mahabhuta* are something broader, but more abstract than molecule, which will be explored in modern science too in coming future. Even then it is clear that whatever the effect *Uttarbasti* drugs have on the physiology of reproductive system, it will definitely involve the physiological functions and corrections of other systems.

Thus, *Uttarbasti* can be taken as a parenteral route of administration for reproductive diseases, as it can act both, locally as well as systemically.

### DISCUSSION

- The most controversial point regarding *Uttarbasti* emerges its dose. The dose mentioned by various classics is different and creates conflicts, as it is mentioned from very low doses to very high doses (up to 100 ml on an average). The dose calculated for *Snehana* type of *Uttarbasti* on the basis of description given by Acharya Sushruta

comes around 10 ml. (on the basis of *Svangulimula Sammitam*), while Acharya Sharangdhara has given it approximately 100 ml. This large difference in doses can be due to different approach of Acharyas. Dose indicated by Acharya Sushruta is accurate for intra uterine *Uttar Basti* (IUUB), as the capacity of uterus is approximately 03 ml, while the dose given by Acharya Sharangdhara seems to be appropriate for intra vaginal *Uttar Basti*. Acharya Vagbhata has mentioned the successive increment of the dose of *Uttar Basti* in second and third *Basti* and so on. This view of Acharya is quite scientific and logical as with each *Uttar Basti*, the capacity of uterus to retain the medicine may increase.

- In those *Yonivyapada* and *Artavadushti*, which are related to some infective conditions, *Niruha* type of *Uttar basti* can be given with drugs having antiseptic properties. Keeping this point in view, such diseases are not considered as absolute contraindications for *Uttar Basti*. In *Kashtartava*, it may help to remove stenosis and can facilitate the expulsion of blood leading a decrease in pain, if given intra cervical with some oil. In cases of prolapse, *Niruha* type of *Uttar Basti* with *Stambhaka Dravyas* will lessen the discharges and infection, while an *Anuvasana* type of *Uttar Basti* may help in restoring the normal tone of pelvic musculature leading to correction of prolapse or at least prevention from further prolapse. Acharya Sushruta has considered both, *Niruha* as well as *Anuvasana* type of *Uttar basti*. It denotes that the *Uttarbasti* was used for both the *Shodhana* (cleansing) as well as *Shamana* (pacifying) purpose. These days

*Uttar Basti* is not given in decoction based medium (*Niruha*). But, as it is mentioned by Acharya Sushruta very clearly, it was in practice those days. It seems that *Niruha* or *Anuvasana* was decided as per the requirement and the underlying pathogenesis. For infective type of disorders, *Niruha* type of *Uttar Basti* looks more appropriate, while for nutritive purpose & in cases of *Vandhyatva*, *Anuvasana* type of *Uttar Basti* can be better. It is very obvious that very little dose of *Uttar Basti Dravya* can reach to peritoneal cavity, as most of it returns. In several investigative procedures, various dyes are injected through the uterine cavity to pass through fallopian tubes. All of it gets absorbed there. The same type of absorption can be assumed for the Ayurvedic drug instilled by *Uttar Basti*, provided proper antiseptic care has been taken. Drug injected on this pattern can not only get absorbed, rather can work on various conditions like peritubal adhesions, endometriosis, pelvic inflammatory disease & ovarian cyst etc. Yet, undoubtedly, serious research is needed in this aspect.

- It should be different and based on cleansing in infective condition like *Pittala* and *Shleshmala*, while it will be more nutritive in cases of *vandhyatva*. In the same way, *Uttar Basti* cannot be the same for all the factors of *vandhyatva*. For cervical factor, the medicine should be injected in cervical cavity, while in uterine factor; it should be instilled in endometrial cavity. To treat the tubal blockage, medicine should be put in the uterine cavity, but nearer to the fundus and uterine cornu, so that it must reach up to the fallopian tubes. For cervical as well as

ovarian factor, it is not essential to negotiate the internal os, but for uterine and tubal factors, to negotiate the internal os is the mandatory.

- Now a day, either Karman's cannula is used for *Uttar Basti* or especially designed metallic one. Both the cannulas are long, thin and used by inserting inside the uterine cavity. *Uttar Basti* cannula practiced these days is turned in the shape of uterine sound to pass it through the uterine cavity. But the *Pushpa Netra* defined by Acharyas seems to be different from these canulas and appears nearer to Leech Wilkinson's canula. All the characteristics of *Uttar Basti* Cannula (*Pushpa-Netra*) make this nearer to something like Leech Wilkinson's cannula. With this type of cannula, more of the medicine can retain inside increasing its efficacy.
- Because of influence of modern science, it is said that oil embolism can be a complication of *Uttar Basti*. But Ayurveda itself has ruled out the possibility of it. The phenomenon of *Pratyavartana*, which is considered essential for *Snehana* type of *Uttar Basti*, automatically rules out the possibility of oil embolism. It denotes that Ayurveda already knows the importance of returning of oil/*ghrita* and does not allow any type of embolism, and that is why it emphasizes much on the *Pratyavartana*.
- Another allegation, which *Uttar Basti* faces, is the possibility of ascending infection and PID as a complication. In several infectious conditions, especially antibiotic resistant and recurrent urogenital infections, certain Ayurvedic medicines and measures give very good results.

## CONCLUSION

At present, *Uttar Basti* is limited to a very few gynaecological diseases, and is not applied to disorders other than certain conditions like infertility and irregular menstruation. But classics have indicated *Uttar Basti* for all kind of gynaecological disorders. This Ayurvedic approach seems to be quite scientific and looks as route of administering the drug locally on target organs. Classics have mentioned role of *Uttar Basti* on all the disorders from *Yonivyapada* to *Artavadushti*, from *Vandhyatva* to prolapse and even in both scanty as well as heavy menstruation.

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