

## Clinical Evaluation of Cow-Urine Extract special reference to Arsha (Hemorrhoids)

Dr. Omaprakash W.Talokar<sup>1</sup>, Dr.Archana R. Belge<sup>2</sup>, Dr.Raman S. Belge<sup>3</sup>

<sup>1</sup>Asso.Professor, Dept. of Rasshastra & Bhaishjya Kalpana, R.T. Ayurved Mahavidyalaya ,  
Akola (Maharashtra) India.

<sup>2</sup>Professor: Dept. of Swasthavritta, Shree Saptashruni Ayurved Mahavidyalaya & Hospital,  
Nashik (Maharashtra) India.

<sup>3</sup>Professor: Dept. of Rasshastra & Bhaishjya Kalpana, Shree Saptashruni Ayurved Mahavidyalaya  
& Hospital, Nashik (Maharashtra) India.

**ABSTRACT:** There are various traditional healing practices in India including Herbal therapies and other forms of alternate therapies which are non-clinical. Based on certain traditional and Ayurvedic point of view, consumption of Gomutra (Cow-Urine) is a traditional remedy for various health conditions e.g. Arsha (Hemorrhoids). Cow-urine therapy is an ancient therapy part of Ayurveda. Cow-urine tries to balance the body-elements by re-establishing the equilibrium for a healthy body.

Hemorrhoids are a common anorectal condition defined as the symptomatic enlargement and distal displacement of the anal mucosa. An inflammatory reaction and vascular hyperplasia may be present in Hemorrhoids.

The present research paper deals with the oral supplementation of Cow-urine in hemorrhoids patients, which has prevented the time-consuming, painful and expensive complications of Hemorrhoids.

**Keywords:** Gomutra, Gomutraghana, Cow-Urine, Arsha, Hemorrhoids

### I. INTRODUCTION

#### Hemorrhoids-

The exact pathophysiology of Hemorrhoidal development is not clear. The correlation of varicose veins to that of hemorrhoids is discarded as these two conditions are proven to be distinct entities. Hemorrhoids are the abnormal downward displacement of the anal cushions causing venous dilatation. These anal cushions show changes like abnormal venous dilatation, vascular thrombosis, degenerative process in the collagen fibres and fibroelastic tissues, distortion and rupture of the anal sub epithelial muscle.

Constipation, prolonged straining during defecation, pregnancy; low-fibre diet, spicy foods and alcohol are known to precipitate hemorrhoids.

Goligher's classification of Hemorrhoids-

Grade 1- The anal cushions bleed, but do not prolapse.

Grade 2 – The anal cushions bleed, prolapse through the anus on straining but reduce spontaneously.

Grade 3 – The anal cushions prolapse through the anus on straining and require manual replacement into the anal canal.

Grade 4 – The prolapse stays out at all times and is irreducible. Acutely thrombosed incarcerated internal hemorrhoids and incarcerated thrombosed hemorrhoids involving circumferential rectal mucosal prolapsed are also Grade 4 hemorrhoids.<sup>1</sup>

The Ayurvedic texts have defined six types of Arshas.<sup>2,3</sup>

#### Cow-urine-

The Ayurvedic texts have defined the therapeutic effects of certain animal products e.g. honey, milk, pitta, vasa, majja, blood, meat, stool, urine, semen, bones, muscles, horn, nails, hair and gorochana.<sup>4</sup>

Amongst these animal products Mutra (Urine) is an important animal product.

Urine is obtained from eight different sources.<sup>5</sup>

Mutra, due to its Ruksha, Tikshna, Ushna Guna; Lavanarasa, Kashaya Anurasa is used to treat krumi, shopha, anaha, pandu, visha, shvitra and Arsha.<sup>6</sup>

Urine can be obtained from eight different types of animals, Gomutra (Cow-Urine) is considered as the best.<sup>7</sup> Cow-urine is used to treat skin-disorders (kilasa, kushtha, pama, kandu), G.I. disorders (gulma, aanaha, atisara, krumi, kamala, pandu, mutraroga), shwasa, kasa and visha. These diseases can be treated with oral administration of Cow-urine.

Although Cow-urine is a panacea, but the availability of fresh Cow-urine has always remained a problem. Therefore the researcher decided to prepare Gomutra-ghana (extract of cow-urine) which can be made available at all the times. Several botanical extracts are also known to improve microcirculation, capillary flow and vascular tone and to strengthen the connective tissue of the perivascular amorphous substrate.

Urine has been known to contain enteric pathogens, urine therapy is culturally applicable in some health conditions and also advocated as alternate therapy. The bacterial pathogens found in urine are –

Enterococci – enterococcus faecalis, basillus, Staphylococcus saprophyticus, Hemolytic streptococci – Streptococcus agalactiae, citrobacter spp.; E. coli, Enterobacter aerogenes, Enterobacter cloacae, coagulase negative staphylococci, Proteus spp. such as Proteus mirabilis, Pseudomonas aeruginosa, Klebsiella spp. such as Klebsiella pneumonia, K. oxytoca, Acinetobacter species and diphtheroids.

It is further recommended that alternate therapies should be non-hazardous and therefore inapporinate administration of urine therapy be monitored. It is necessary that treatment of diseases especially that of public health importance using traditional remedies should be supported by scientific evidence.

#### **The main elements of Cow-urine-<sup>8</sup>**

Urea, uric acid, minerals

Bioactive substance and hormones-

Urokinase, epithelial growth factors, growth hormones, erythropoietine, gonadotrophins, tripsyn inhibitor, allantoin, anti-neoplaston, H-11 beta-iodole-acetic acid

Nitrogen, sulphur, copper, iron, phosphate, sodium, potassium, manganese, carbonic acid, calcium, salts, Vit. A,B,C,D,E; lactose sugar,enzymes, water, hippuric acid, creatinine, aurum hydroxide.

Cow-urine and distillate inhibited the free radicals by scavenging of Superoxide and DPPH radicals.

Comparatively fresh cow-urine was found to be more active than its distillate. Fresh cow-urine and its distillate have exhibited antimicrobial activity. The activity of fresh cow-urine was comparable to that of Ofloxacin.

Phenols are bactericidal to gram positive and gram negative bacteria. Therefore presence of phenols in cow-urine has a potent anti-microbial activity. The fresh cow-urine contains more amount of phenol and hence has a better antimicrobial activity.<sup>9</sup>

#### **US Patents regarding Cow-Urine**

##### **Patent No. 6410059-**

The invention relates to a novel use of cow-urine as activity enhancer and availability facilitator for bioactive molecules, including anti-infective agents. The invention has direct implication in drastically reducing the dosage of antibiotics, drugs and anti-infective agent while increasing the efficiency of absorption of bio-active molecules, thereby reducing the cost of treatment and also the side-effects due to toxicity.

##### **Patent No. 6896907, 7235262**

The invention relates to a novel pharmaceutical composition comprising an effective amount of bio-active fraction from cow-urine distillate as a bioavailability facilitator and pharmaceutically acceptable additive selected from anti-cancer compounds, drugs, therapeutic and nutraceutical agents, ions and similar molecules which are targeted to the living systems.

## **II. AIMS & OBJECTIVES**

- 1) To study the aetiopathogenesis of Arsha in the light of both Ayurvedic and Modern perspective.
- 2) To study the ancient literature in the Ayurvedic texts regarding Cow-urine.
- 3) To evaluate the efficacy of Gomutra-ghana in Arsha.

## **III. MATERIALS & METHODS**

- 1) Preparation of Gomutra-ghana, was done by evaporating Gomutra.<sup>10</sup> Output of Ghana- 2% of Gomutra.
- 2) A randomized single blind clinical trial conducted in experimental groups of Department of Shalyatantra of Shree Ayurved College, Nagpur.
- 3) A total of 30 uncomplicated symptomatically diagnosed cases of Arsha were studied during this research work.
- 4) Treatment was given for 30 days.

## **IV. INCLUSION CRITERIA**

- 1) Diagnosed cases of uncomplicated Arsha of both the sexes in the age group of 21 to 65 years.
- 2) Patients of hemorrhoids with Grade I & II were selected.

## V. EXCLUSION CRITERIA

The patients with following complaints were excluded from this study -

Peptic ulcers	Duodenal ulcer
Diabetes Mellitus	Tuberculosis
Ca-rectum	Grade III & Grade IV hemorrhoids
Fissure-in-ano	Pregnancy

## VI. TREATMENT SCHEDULE

Medicine:- Gomutra-ghana

Anupana- Jala

Dosage – 250 mg of Gomutra-ghana alongwith water, twice daily

Duration of Treatment – 30 days

Follow-up – at weekly interval

## VII. ASSESSMENT CRITERIA

The improvement in the patients was assessed mainly on the basis of relief in the signs and symptoms of the disease. For this purpose the main signs and symptoms were given a score according to their severity.

The details of the scores adopted for the main signs and symptoms in this study are as follows.

### Symptoms noted

- 1) Localized pain during / after defecation
- 2) per-rectal bleeding

### Symptomatic relief was assessed as per following gradation-

<input type="checkbox"/>	No relief	+
<input type="checkbox"/>	Mild relief	++
<input type="checkbox"/>	Moderate relief	+++
<input type="checkbox"/>	Excellent relief	++++

Total effect of therapy was assessed as follows-

Cured:	100% relief
Markedly improved:	More than 50% relief
Improved:	25 To 50% relief
Unchanged:	Below 25% relief

## VIII. OBSERVATIONS & RESULTS

1. Sex- Female – 10 (33.33%), Male – 20 (66.66%)
2. Age – 20-30 years (6.6%), 30-40 years (26.6%),
3. 40-50 years (43.3%), 50-65 years (23.5%)
4. Occupation – Sedentary (50%), Housewife (30%), Ambulatory working (20%)
5. Diet – Veg (33.33%), Non-veg (66.66%)
6. Koshtha –Krura (70%), Madhya (23.3%), Mrudu (6.7%)
7. Dosha –Vataja – 66.66%, Pittaja – 6.6%, Kaphaja – 26.8%
8. Constipation – 93% patients, normal defecation in 7%
9. Perianal Itching – 85%
10. Pile mass position – 3° Clock (43.3%), 7° Clock (16.6%), 11° Clock (13.7%); 3°, 7°, 11° Clock (16.6%), 11° Clock (6.6%)
11. Grade I – 70%, Grade II – 30%
12. Position –External - 0%, Internal – 83.03% , Extero-internal – 16.7%
13. Bleeding –Mild- 60%, Moderate – 30%,
14. Severe – 3.3%, No bleeding – 6.7%
15. Relief –Relieved 83.3%,Not relieved – 0.66%, Mild relief – 10%

## IX. DISCUSSION

The Ayurvedic texts have an abundant literature regarding the Cow-urine. The anti-microbial, bio-availability enhancer, free-radical scavenging property of Cow-urine is a well evidenced observation. However the current research paper has dealt with the effect of Cow-urine on Hemorrhoids of Grade I & Grade II.

Sushruta samhita states that Arsha can be treated by the four ways viz. Bshhaja (Internal medication), Kshara (Local application), Agnikarma (Cauterization), Shastrakarma (Surgery). This work is based on the principle of Aushadhi Chikitsa.<sup>12</sup>

Cow-urine is a known appetizer (Agnivardhaka). Since Agnimandya is responsible for all types of the diseases, Gomutraghana through its Agnivardhaka effect relieves the Agnimandya.

Cow-urine acts on the large intestine through its Mala-bhedana effect. This results into the smooth excretion of stool, thereby providing a greater relief to the patients of hemorrhoids e.g. relief from pain during defecation, bleeding, perianal itching.

### X. CONCLUSION

The oral supplementation with the Cow-urine prevents the time-consuming, painful and expensive complication of Hemorrhoids of Grade I & grade II. This research work may provide a new dimension to the treatment of hemorrhoids with the help of Alternate therapy viz. Cow-Urine.

### REFERENCES

- [1]. Varut Lohsiriwat, “ Hemorrhoids: basic pathophysiology to clinical management”, <http://wignet.com> 2012 May 7; 18 (17) : 2009-2017
- [2]. Sushruta, *Sushruta Samhita*, in Nidanasthanam II/3; Borkar D.B.; Raghuvanshi Prakashan, Pune, 1<sup>st</sup> ed.,1908,pp. 267
- [3]. Madhavakara, *Madhava Nidana*, in Arsha Nidanam 5/1; Narendranatha Shastri, Motilal Banarasidas, Delhi, 1<sup>st</sup> ed., 2001, pp. 193
- [4]. Charak, *Charak Samhita* ,in Sutrasthana 1/70; Satyanarayan Shastri,Chaukhamba Bharati Academy, Varanasi, 1<sup>st</sup> ed.,1992, Vol..I, pp 41
- [5]. Vagbhata,*Ashanga sangraha*, in Sutrasthana 6/141, Atrideo Gupta, Krushnadas Academy, Varanasi, 1<sup>st</sup> ed., 2005, Vol.I, pp. 61
- [6]. Vagbhata,*Ashanga Hridayam*, in Sutrasthana 5/83, Tripathi Brahmananda; Chaukhamba Sanskrit Pratishtan, Delhi, 1<sup>st</sup> ed., 1992, pp.84
- [7]. Bhavamishra, *Bhavprakash* – in Mutravarga / 4, Brahmashankar Mishra; Chaukhamba Sanskrit Sansthan, Varanasi, 9<sup>th</sup> ed. Vol.I, pp 778
- [8]. Dr. Jain, “ The main elements of Cow- Urine & their functions”, <http://www.cowurine.com>
- [9]. Edwin Jarald, Sheeja Edwin, Vaibhav Tiwari, Rajesh Garg, Emmanuel Toppo, “ Antioxidant & antimicrobial activities of Cow-Urine”, *Global Journal of Pharmacology*, 2(2); 20-22, 2008
- [10]. Sharangdhara, *Sharangdhara samhita*, in II/8/1; Chowkhamba Orientalia, Varanasi, 6<sup>th</sup> ed., 2005, pp.206
- [11]. Omprakash W. Talokar – *Aushadhinirman shastra me mutra prayoga ka sahityik vishleshanatmaka adhyayan ke satha Gomutraghana ke Arshoghna Prabhava ka Aturalayina adhyayana*; M.D. (Ayu.) Thesis Submitted to Nagpur University, Nagpur., 2003
- [12]. Sushruta, *Sushruta Samhita*, in Chikitsasthana 6/3; Shastri Ambikadatta, Chowkhamba Sanskrit Sansthana, Varanasi, 14<sup>th</sup> ed.,2006, pp.36