

International Journal of Research in AYUSH and Pharmaceutical Sciences

Review Article

EVALUATION OF MALE REPRODUCTIVE COMPONENT IN AYURVEDA WITH ITS APPLIED ASPECT

Prodhani Nazrul Islam^{1*}, Parvin Ruksana²

¹Assistant Professor, Department of Rachana Sharir, IAMC, USTM, Meghalaya.

² Consultant cum Assistant Professor Department of PTSR, IAMC, USTM, Meghalaya.

ARTICLE INFO

Article history:

Received: 18-03-2024

Accepted: 21-04-2024

Published: 19-05-2024

Keywords:

Male Reproductive components, Morphology, Histology, Applied Aspect, Ayurveda.

ABSTRACT

The reproductive system of the male includes penis, testes, epididymis, vas deferens, ejaculatory ducts, and accessory glandular structures like seminal vesicles, prostate, bulbo-urethral gland, and scrotum. In Ayurveda above components are highlighted with the following words *Vrishana, Muska, Sukra vaha srotas, Sukra dhara kala*, etc. Even for a single structure various terminologies are mentioned in classics. For example concerning penis, *Medhra, Mehana, Upastha, Sepha, Dhwaja, Pausendriya* and *Linga* are mentioned. All the structures are studied according to their contexts and interpreted accordingly with the most relevant components of the male reproductive system. They are differentiated from one another to establish the morphophysiological aspects. Morphological description measuring 10 *Angula* found for *Medhra* and 6 *Angula* for *Sepha* which represent length of the urethra and penis respectively. "*Vrishanayo ando*" here it is oval in shape specifically highlighting the shape of testis. *Virya vahi sira* can be understood with the histological aspects such as seminiferous tubules, reti testis and epididymis. *Sukradhara kala* is the epithelial lining of entire structures. Vas deferens can be understood with *Muska Srota, Phala srota, Sukra vahini, Sukra vaha* and *Sukra vaha srotas*. Seminal vesicle which contains 65-70% of seminal fluid can be taken as *Sukrasaya*.

The present work emphasizing male reproductive components in Ayurveda with different structures are evaluated in different context some time highlighting the morphological, functional, histological, and applied aspects.

INTRODUCTION


The reproductive system of the male includes penis, testes, epididymis, vas deferens, ejaculatory ducts, accessory glandular structures like seminal vesicles, prostate, and bulbo-urethral gland, and scrotum. Mostly these are emphasis in relation to morbidity, therapeutics and also morphological context. The present study here proceeds with the following aim and objectives.

AIM AND OBJECTIVES

- Evaluation of male reproductive component in Ayurveda.
- Anatomophysiological considerations of various terminologies will be elucidated.
- Applied aspects of these structures with references were studied.

MATERIALS & METHOD

The present study was designed to be carried out in the following platform. Male reproductive components are analyzed from classics and interpreted. Elucidated terminologies were analyzed from embryological, surface anatomical, dimensions, histology, and applied aspects. Table presentations were prepared highlighting the above points.

Access this article online	
Quick Response Code	https://doi.org/10.47070/ijraps.v8i4.163
	Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)

OBSERVATION AND RESULTS

The present work wants to emphasize male reproductive components in Ayurveda with different

structures as advocated in different contexts. After going through all components it is summarized as below

Table 1: Embryological Origin of Testis in Ayurveda

Structures	Embryological origin	Correlation
Male Reproductive Components	Originate in 2 nd month as <i>Pinda</i> (hard and round) shape zygote-male baby ^[1]	Development of the reproductive system starts in 2 nd month.
Testis (<i>Vrishana</i>)	<i>Sara of Mamsa, Rakta, Kapha</i> and <i>Medas</i> ^[2]	Septum transversium – <i>Mamsa</i> Tunica vasculosa- <i>Rakta</i> Tunica albugenia- <i>Kapha</i> Tunica vaginalis – <i>Medas</i>

Table 2: Dimension of the Male Reproductive Components

Modern	Ayurvedic	Dimension
Testis	<i>Vrishana</i>	Size- 2 <i>Angula</i> ^[3] Shape- Oval in shaped i.e., " <i>Vrisanoando</i> " ^[4]
Scrotum (With testis)	<i>Vrisanayo</i>	Length- 6 <i>Angula</i> , Circumference- 8 <i>Angula</i> ^[5]
	<i>Mushka</i>	Look like pendulous mass i.e., <i>Galaganda roga</i> ^[6]
Prostate	<i>Paurusha Granthi</i>	Size: Look like a big eye ball ^[7]
	<i>Asthila</i>	Shape: Round in shape ^[8]
Penis	<i>Sepha</i>	Length-6 <i>Angula</i> , Circumference-5 <i>Angula</i> ^[9]
	<i>Medhra</i>	Length-10 <i>Angula</i> (length of urethra) ^[10]
	<i>Mehana</i>	Length in flaccid stat - 4 <i>Angula</i> erect stat- 6 <i>Angula</i> ^[11]
Urethra	<i>Uttara Vasti Netra</i>	Length- 10 <i>Angula</i> , Diameter- equal to <i>Mugda</i> ^[12]

Table 3: Surface Anatomy of the Male Reproductive Components

Modern	Ayurvedic	Surface Anatomy
Testis	<i>Vrishana</i>	<i>Vitapamarma</i> present between <i>Vrishana</i> and <i>Vangsana</i> . ^[13]
	<i>Mushka</i>	<i>Mushka</i> is a structure which is placed below bladder along with <i>Sepha</i> ^[14]
Prostate	<i>Paurusha Granthi</i>	" <i>Vastisirshachaopaurusha</i> ". It is placed around the internal orifice. ^[15,16]
	<i>Asthila</i>	It is present at <i>Vastimukha</i> (internal orifice) ^[17]
Penis	<i>Sepha</i>	<i>Sepha</i> is bound in the middle by <i>Sephasevani</i> (i.e., raphe) and it is situated next to the urinary bladder (<i>Basti</i>). ^[18]
	<i>Mehana</i>	Distance from umbilicus- 12 <i>Anguli</i> . <i>Medhra</i> contains one <i>Kurcha</i> which forms due to <i>Dhamanisannipata</i> ^[19] .
	<i>Medhra</i>	Located in <i>Gudaasthivivara</i> along with other structures like <i>Vasti</i> , <i>Vastisira</i> , <i>Vrishana</i> , <i>Guda</i> . ^[20]
	<i>Paurusham</i>	Located in <i>Vasti mukha</i> ^[15]
Seminal Vesicle	<i>Sukrasaya</i>	It is located below the <i>Vasti</i> 2 <i>Angula</i> in right side where <i>Sukra</i> is ejaculated in <i>Mutrasrota</i> . ^[21]

Table 4: Applied Anatomy of the Male Reproductive Components

Components	Applied Importance
Testis	<ol style="list-style-type: none"> 1. <i>Vrisana parshasiravedhya</i> is indicated in <i>Mutravidhi roga</i>.^[22] 2. <i>Vitapa marma</i> present between <i>Vrisana</i> and <i>Vangsana</i> and injury leads to <i>Sanda</i> (impotence), <i>Alposukrata</i>.^[23] 3. Injury to <i>Vrisana</i> leads to infertility or impotence. ^[24,25] 4. In <i>Vatikasanda</i> congenital disorders <i>Vrishana</i> get affected by <i>Vayu</i>.^[26] 5. In the treatment of <i>Medajavidhi</i>, <i>Phalasevani</i> should excluded from giving incision.^[27] 6. <i>Mushkasayathu</i> (swelling) is one of the symptoms due to excess sexual intercourse.^[28]
Scrotum	<ol style="list-style-type: none"> 1. In <i>Muska</i> one should use moderate <i>Bandage (Samabandha)</i>.^[29] 2. In the <i>Samprapti</i> of <i>Vridhhirogaphalokoshavahinidhamani</i> get affected and thus swelling occur at <i>Phalakosha</i>.^[30] 3. <i>Vrishanokandu</i> means scrotal dermatitis occur in scrotum^[31].
Epididymis & Vasa Diferens	<ol style="list-style-type: none"> 1. During <i>Ashmari</i> extraction operation precaution should be taken not to get injury to <i>Mushkasrota</i> or it will causes <i>Dhwajabhanga</i> (erectile dysfunction).^[32] 2. Disease occur due to <i>Sukravahasrotavidhya</i> i.e., <i>Klaibya</i>, <i>Chiratproseka</i> and <i>Raktasukrata</i>.^[33]
Ejaculatory Duct	<ol style="list-style-type: none"> 1. <i>Sukraharini</i> should not be injured during <i>Ashmari</i> extraction operation. Injury to these cause <i>Marana</i> (death) and <i>Klibya</i> (impotency).^[32] 2. One of the cause of <i>Sukavahasrotadusti</i> is the use of <i>Sastra</i>, <i>Kshara</i> and <i>Agni</i> in <i>Sukra vahini</i>.^[34] 3. <i>Sukramargasanitam</i> is one of the symptom due to excess sexual intercourse.^[35]
Seminal Vesicle	In <i>Pavanindriya</i> , a congenital disease <i>Sukrasaya</i> get affected by <i>Garbhasayavayu</i> at the time of formation. ^[36]
Penis	<ol style="list-style-type: none"> 1. "<i>Klaibyam Sarvadalingapatnavasthanam</i>". Inability to achieve erection of <i>Sepha</i> seen in <i>Klaibya</i>.^[37] 2. <i>Uttaravastinetra</i> length is equal to the <i>Medhra</i> i.e., 10 <i>Angula</i>. And diameter like <i>Mutravahasrota</i> and i.e., equal to the size of <i>Mugda</i>.^[10] 3. In the upper part of <i>Medhra</i> there are 2 <i>Avedyasira</i> which present on both side of <i>Romaraji</i> (pubic hair).^[38] 4. <i>Medhra Madhya siravyadha</i> is indicated in <i>Parivartika</i>, <i>Upadhamsa</i>, <i>Sukaroga</i>, <i>Sukradhatu vikar</i>.^[39] 5. Diseases occur in <i>Sukadosha</i> due to the abnormal use of "<i>Lingavidhikara yoga</i>".^[40] 6. Sex with <i>Pravidha lingam purusha</i> one of the cause of <i>Yoni vyapad</i>.^[41] 7. Severe <i>Medhraroga</i> which causes <i>Marmacheda</i> is the cause of <i>Poumsatyau paghatajakraibya</i> which is of incurable.^[42] 8. In relation to <i>Shataponakguhyaroga</i>, one of the main symptom is "<i>Sidrenumukhityammehanam</i>" (penis become porous).^[43] 9. <i>Ativevaya</i> without taking <i>Vajikarana</i> cause <i>Sukrakshaya</i> and thus produce <i>Dhwajabhanga klaibya</i>.^[43] 10. Diseases of penis: 5 types <i>Upadhansharoga</i> (venereal disease) occur in <i>Medhra</i>,^[45,46] <i>Medhra arsa</i>,^[47] <i>Medhrasopha</i> (swelling)^[48], <i>Nirudhaprakasha</i>^[49] <i>Napumsaka</i>^[50], <i>Suka roga</i>^[51], <i>Guhya roga</i>^[52], <i>Klaibya</i>^[53].
Urethra	<ol style="list-style-type: none"> 1. Injury to <i>Mutravaha</i> cause <i>Marana</i> (death) and <i>Mutrappurnavasti</i>.^[54] 2. In case <i>Asmari chikitsa</i> if it gets obstructed in <i>Mutramarga</i> then it should remove by <i>Nadisastra</i> and collected by <i>Badisayantra</i>. 3. In case of <i>Mutrjatharaadharasrota</i> get obstructed.^[56] 4. <i>Sukra ashmari</i> get obstructed the <i>Mutramarga</i> which is produces in between the tract of <i>Medhra</i> and <i>Vrisana</i>.^[57] 5. <i>Vata asthila</i> causes <i>Bohirmargaavorodha</i> (obstruction).^[58]
Glans and Prepuce	<ol style="list-style-type: none"> 1. In case of <i>Niruddhaprakasha</i> (phymosis) disease <i>Manicharma</i> get affected by <i>Vata</i> and thus blocks the <i>Mutrasrotas</i> (urethra).^[60]

- | | |
|--|---|
| | 2. In case of <i>Parivartika</i> (parapimosis) disease <i>Manicharma</i> and <i>Mani</i> get affected <i>Vata</i> . ^[62] |
| | 3. <i>Mani charma</i> get affected in <i>Nirudhyamaniguhyya roga</i> . ^[61] |

DISCUSSION

The present work wants to emphasize the male reproductive components in Ayurveda with different structures as advocated in different contexts. A series of terminologies are available which highlight the morphological and sometimes related to functional aspect too. Below all these components of male reproductive system are interrelated logically.

- **Testis:** The basic component of the male reproductive system is the testis. The present study finds the following terminologies to interpret testis, *Vrishana*, *Mushka*, and *Phala*. Relating to the embryological origin of *Vrisana*, *Sara* of *Mamsa*, *Rakta*, *Kapha*, and *Medas* are mentioned which can be understood with structural components of testis as *Tunica vaginalis* for *Medas*, *Tunica vasculosa* for *Rakta*, *Tunica albugenia* for *Kapha*, and *Septum transversium* or intermediate septum for *Mamsa*. *Vrisanaparshasiravedhya* is indicated in *Mutravidhiroga* (hydrocele) which can be understood with pempiniform plexus of vein.
- **Scrotum:** For scrotum terminology are mainly used like *Vrishanayo*, *Phalakosha*, *Andokosha* and sometimes *Mushka*. *Chakrapani* told the word *Vrishana* is singular number so there should be *Vrisanyayo* word which can be correlated with testis along with scrotum. (Chakrapani, Ch. chi. 12/94). Size of *Vrishanayo* is 6 *Angula* in length and 8 *Angula* circumference which is logical to indicate the scrotum.
- In *Vridhiroga* swelling occurs in *Phalakosha* where *Phalakosha vahiny dhamani* get affected which clearly indicate accumulation of fluid in scrotum seen in hydrocele where accumulates in the cavity of the tunica vaginalis. *Mushka* sometime indicate both testis and scrotum. The *Mushka* is identical with the *Galaganda* i.e., pendulum like mass is observe around the neck. Here *Mushka* representing scrotum along with testis.

Epididymis: The epididymis is a mass made up highly coiled tubes that act as reservoirs of spermatozoa. Terminologies like *Adhivrishanika* and *Viryavahi sira* are correlating to it.

- **Vas Deferens:** It is the structures that extend from tail of epididymis up to the base of prostate and persist in the spermatic cord finally join with the duct of seminal vesicle and form ejaculatory duct. To indicate the structure some terminology are available like *Viryavahi sira*, *Muska srota*,

Phala srota, *Sukra vahini*, *Sukra vaha* and *Sukra vaha srota*.

- Here *Viryavahisira* used by Sarangadhar can also be interpreted as it carries the spermatozoa. The terminology like *Muskasrota*, *Phala srota* etc are indicating both vas deferens and spermatic cord, most of the time and some time separately.
- **Ejaculatory Ducts:** The structure formed by union of vas deferens and 2 duct of seminal vesicle. Its secretion almost takes 65-70% of semen. Observing the functional and applied aspects, the terminologies like *Sukramarga*, *Sukravahinadi*, *Sukraharini* and *Sukra proseka* can be mentioned. It is clearly mentioned in *Sukragata vata* that obstruction of *Sukramarga* induces decrease or absence of *Sukra*. This clearly shows obstruction of ejaculatory duct. In *Sukrakshaya* symptom like *Chirtaproseka*, *Proseka cha alpo rakta sukra darsanam*, also represent delayed ejaculation and ejaculation with blood mixed semen. Here *Sukra proseka* means ejaculatory duct.
- **Seminal Vesicles:** These are fibro muscular pouches lined with columnar epithelium lying on the posterior aspect of the bladder. The seminal vesicles are two in numbers. *Sukrasaya* and *Reta Sthanam* terminologies are mainly used to represent it.
- *Sukrasaya* is located below the *Vasti 2 Angula* in right side where *Sukra* ejaculated in *Mutravahasrota* almost exhibit nearer identity in the aspect of anatomical position.
- **Prostate:** The prostate gland lies in the pelvic cavity in front of the rectum and behind the symphysis pubis, surrounding the first part of the urethra. It secretes 30-35% of ejaculate semen. Two terminologies namely *Paurushagranthi*, *Asthila* are mainly mentioned to indicate it, which are located at the neck of the urinary bladder and looks like big eye ball i.e. round in shaped.
- **Penis:** Following terminologies are mainly used to identify the penis i.e., *Medhra*, *Mehana*, *Sepha*, *Dhwaja*, *Upastha*, *Paurusham*, *Sisna*, *Linga*, *Purushindriya*.
- In above terminology dimension found in *Medhra*, *Mehana* and *Sepha*. *Mehana* measures 4 *Angula* in flaccid state and 6 *Angula* in erect state *Uttara vastinetra* length is equal to the *Medhra* i.e., 10 *Angula*. Probably *Mehana* is the external part of penis and *Medhra* is the entire length of the penis from the internal orifice at the bladder up to the

external opening or meatus of penis. The measurements of *Sepha* are 6 *Angula* length and 5 *Angula* circumference. Here it is clearly mean at erect state only as *Mehana* at erect state 6 *Angula* lengths. So *Mehana* and *Sepha* seems to be used in terms of normal copulative part. Distance from umbilicus to *Mehana* is 12 *Anguli* which indicate surface anatomical landmark for the base of the penis from umbilicus. The consideration of *Upastha* which synonym is *Yoni* and it is one of the *Karmendriya* shows its importance in both male and female. Further the function *Ananda* i.e., pleasure attributed to it indicates its psychological importance also in parlance to other *Karmendriyas*. *Linga* is used mainly for reproductive organ i.e., penis which also serve for urination and semen ejaculation. The terminology *Dhwaja* means flag, which is mean for potentiality of muscularity emphasis through erectile functional aspect of penis essential in reproduction.

- Function of the *Upastha* is *Ananda* and it is one of the *Karmendriya* which shows its reproductive functional aspect on *Sukra* comes out through the *Sepha* at the height of sexual intercourse under the influence of *Apanavayu*.

Internal Structure of Penis

- **Urethra:** Male urethra is a tube extended from the urinary bladder to external opening or meatus at the tip of penis and it is 18 to 20cm long. The structural identity of urethra like a tube can be with following terminologies *Mutravahisrota*, *Mutravaha*, *Mutrapatha*, *Mutramarga*, *Mehanamarga*, *Adharasrota*, *Adharamarga*, *Mutraproseka*, *Mutraseka*, *Nala*, and *Bohirmarga*.
- Here it is to be noted the length of *Uttara vatinetra* in relation to male is 10 *Angula* from the applied aspect of its application in this passage. So it is considered as length of male urethra which is logical.
- **External Orifice:** Terminologies are mainly used i.e., *Mehandarandra*, *Medhrarandra*, *Medhradwar* to understand the external orifice. The size of *Uttara vatinetra* is equal to *Mugda*, which is identical with the size of external orifice itself.
- **Internal Orifice:** In *Susruta samhita nidan sthana* it is said that *Vasti* having *Aka dwar* (one opening) in middle of the lower part which is surrounded by *Sira* and *Snayu*. *Vastimukha* terminology is mainly used to represent the internal orifice which is present near prostate.
- **Prepuse and Glans:** To understand these terminologies are mainly used i.e., *Mani* and *Mani charma*, *Medhraagra*, *Medhracharma*. Here

terminology *Mani* is used for glans, *Mani charma* and *Medhracharma* for prepuse while *Medhraagra* may interpret with both prepuse and glans as *Sthagika* bandage is advised in *Medhraagra*.

- **Corpus Spongiosum:** It is basically a mass of spongy like region of erectile tissue surrounding the male urethra throughout its whole length inside the penis. The term *Medraantra* which mentioned in relation to *Mutrasula* is clearly identical with corpus spongiosum.
- **Corpus Cavernous:** Corpora cavernosa is another erectile tissue present entire length of penis which filled with blood during erection. They are in close apposition with each other throughout their length. Two corpora cavernosa lies along the penis shaped. They are formed by a spongy like tissue containing trabaculae with irregular blood filled space.
- Most identical terminology is *Sukra vahi sira*. Here it is emphasized due to the "*Harsa*" *Sukra vahasira* become *Sphurna* (full & dilated) and thus penis becomes erect (*Dhwajautsata*). These clearly indicate erection of penis with corpus cavernous get filled with blood flow during copulation.
- **Perineal Raphe:** Perineal raphe is present in whole length of both scrotum and penis. Two terminologies are *Sevani* and *Phalasevani* mainly used for perineal raphe. Apart from these above structure the vascular distribution as well as nerve supply of male reproductive organ are also tried to interoperate as below
- **Artery Supply:** In spermatic cord, testicular artery, artery to vas deferens and artery to cremaster are present. Injury to these structures leads to atrophy to the testis and thus can cause impotence oligospermia and infertility. In Ayurveda 4 numbers of *Avedyasira* is said to be present in these region along with *Vitapa marma*. *Vitapa marma* present between *Vrisana* and *Vangsana* and injury leads to *Sanda* (impotence), *Alposukrata* (oligospermia). This clearly indicates the vulnerability of the structure hypnotized as *Vitapamarma*. Hence it is logical to interpret the therapeutic aspect of testicular artery and artery to vas deferens with *Avedyasira* (prohibited to surgery).
- **Veinous Drianage:** *Siravyadha* in *Parivartika*, *Upadhamsa*, *Sukaroga*, *Sukradhatu vicar roga* is advised in *Medhra Madhya sira*. This can be understood with deep dorsal vein which drains into the prostatic plexus of veins. *Vrisana Parshasira vedhya* is indicated in *Mutra vridhiroga* (hydrocele) which can be understood with pempiniform plexus of vein.

- **Nerve Supply:** Nerve supply of penis contains second, third and fourth sacral spinal segments via the pudendal nerve and pelvic plexuses. Among 6 *Kurcha*, 1 *Kurcha* present in *Medhra* which form due to *Dhamani sannipata*. Haranchandra clarify here that all the 5 *Kurcha* are *Snayu sannipata* while *Kurcha* present in *Medhra* is *Dhamani sannipata*. It can be understood with nerve plexus. To represent nerve supply of remaining parts these terminologies are mainly used i.e., *Sukra pradurbhaba dhamani* 2 in numbers and *Sukra visarga dhamani* 2 in numbers.
- **Histology:** The structures of reproductive system are formed by connective tissue and muscular tissue. The layers of the testis are formed by epithelial tissue. The terminologies like *Viryavahisira*, *Sukradharakala*, *Retodhara Kala* can be mentioned in this aspects. Also as the *Vrisana* get originated from *Mamsa*, *Rakta*, *Kapha*, *Meda* shows its histological aspects too. Relating to embryological origin of *Vrisana*, *Sara* of *Mamsa*, *Rakta*, *Kapha* and *Medas* are mentioned which can be understood with structural components of testis as e.g. Tunica vaginalis –*Medas*. Tunica vasculosa- *Rakta*, Tunica albugenia- *Kapha*, and Septum transversum or intermediate septum – *Mamsa*.
- **Embryological Origin:** The zygote should be of *Sukrabahulya* (i.e., dominance of y chromosome) to produce male child. Reproductive system starts development in 2nd month of intra embryonic life. In Ayurveda also it is seen that reproductive system originates in 2nd month. If the embryo is male baby 2nd month it looks like *Pinda* (i.e., hard and round) shaped *Peshi* (elongated for female baby) and *Arbuda* (tumour like for hermaphrodite).

CONCLUSION

Male reproductive components are mentioned with different terminologies which are incorporated with some specific structures. This interpretation is mostly based on structural, functional as well as from the applied preview. They are highlighted in relation with dimension or physiological activity and clinical importance. The testis is understood with *Vrishana*, *Mushka*, *Anda*, and *Phala*. *Viryavahisira* can be understood with somniferous tubules, straight tubules, reti testis and body of epididymis. *Sukravahasrota*, most common terminology and used for single structure or even multiple structure in different references accordingly. The present research study advocates further research study in this platform with deeper

knowledge to establish the hypothesis for the benefits of upgrading science.

REFERENCES

1. Susruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sarirsthana. 3/19.
2. Susruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sarirsthana. 4/31.
3. Sushruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sutra sthana. 35/11-13
4. Dalhana –Sushruta Samhita, edited by Vd. Yadavji Trikamaji, First Addition Chaukhambha Surbharati Prakashan, Varanasi, Saarirsthana. 4/31.
5. Caraka Samhita, edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; viman sthana. 8/117.
6. Sushruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, - Nidansthana. 11/29.
7. Dalhana, Sushruta Samhita- edited by Vd. Yadavji Trikamaji, First Addition Chaukhambha Surbharati Prakashan, Varanasi, Cikitsasthana. 37/ 103.
8. Ashtangahrdaya- Vagbhata, edited with Nirmala Hindi Commentary by Dr.Bramhanand Tripathi, Chaukhamba Sanskrit Prakashan 2011 New Delhi. Nidanasthana. 9/ 31
9. Charaka Samhita- edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; Vimanasthana . 8/117
10. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Chikitsa sthana.37/103.
11. Dalhana, Sushruta Samhita edited by Vd. Yadavji Trikamaji, First Addition Chaukhambha Surbharati Prakashan, Varanasi, sutra sthana. 35/ 11-13.
12. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Chikitsa sthana. 37/103.
13. Sushruta Samhita by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sarirsthana /25.
14. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Nidansthana 3/18-19.
15. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000,. Nidanasthana. 3/39

16. Dalhaṇa, Sushruta Samhita- edited by Vd. Yadavji Trikamaji, First Addition Chaukhambha Surbharati Prakashan, Varanasi, Cikitsasthana. 37/ 103.
17. Ashtangahrdaya-Vagbhata, edited with Nirmala Hindi Commentary by Dr.Bramhanand Tripathi, Chaukhamba Sanskrit Prakashan 2011 New Delhi Nidanasthana. 9/ 31
18. Sushruta Samhita- By Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Nidansthana 3/18-19.
19. Sushruta Samhita- By Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, sutra sthana. 35/11-13.
20. Charaka Samhita- edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; chikitsa sthana. 26/37
21. Sushruta Samhita- By Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sarirsthana. 4/22
22. Sushruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sutrasthana. 8/17.
23. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sarirsthana /25.
24. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Chikitsa sthana. 7: 36.
25. Sharngadhara Samhita, Purva Khanda -5: 46.
26. Caraka Samhita- edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; Sarirsthana. 2/21.
27. Ashtangahrdaya-Vagbhata, edited with Nirmala Hindi Commentary by Dr.Bramhanand Tripathi, Chaukhamba Sanskrit Prakashan 2011 New Delhi. chikitsasthana. 13/36,
28. Charaka Samhita- edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; Siddhi sthana. 12/ 8.
29. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sutra sthana 18/24.
30. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Nidansthana 12/4 &12/6.
31. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Nidan sthana. 13/62.
32. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, chikitsa sthana.7/360.
33. Sushruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, sarir sthana.9/12
34. Charakasamhita, edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; Viman sthana. 5/18)
35. Charaka Samhita- edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; Sidhisthahna. 12/ 8.
36. Charaka Samhita- edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; sarirsthana. 2/18
37. Dalhaṇa, Sushruta Samhita- edited by Vd. Yadavji Trikamaji, First Addition Chaukhambha Surbharati Prakashan, Varanasi, chikitsa sthana. 7/36.
38. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sarir sthana. 7/22.
39. Sushruta Samhita- Sarirsthana. 8/17, Chikitsasthana. 19/25.
40. Sushruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, nidanasthana 14/3
41. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, uttara tantra.38/3.
42. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Chikitsa sthana. 26/12-13
43. Ashtangahrdaya, Vagbhata, edited with Nirmala Hindi Commentary by Dr.Bramhanand Tripathi, Chaukhamba Sanskrit Prakashan 2011 New Delhiuttara sthana. 33/22.
44. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Nidan sthana 3/19.
45. Sharngadhara Samhita, purva khanda-2/82.
46. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Nidan sthana. 12/7.
47. Sushruta Samhita by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, nidan sthana. 2/18.
48. Ashtangahrdaya, Vagbhata, edited with Nirmala Hindi Commentary by Dr.Bramhanand Tripathi, Chaukhamba Sanskrit Prakashan 2011 New Delhiuttara tantra. 33/6.
49. Sushruta Samhita - by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, nidanasthana- 13/55.

50. Charaksamhita, edited by Sharma RK, Dash Vaidya Bhagwan, Chowkhamba Sanskrit Series Office, Varanasi, 2011; sarirsthana. 2/17-21)
51. Sushruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, nidanasthana 14/3
52. Astanga Hridaya Vagbhata, edited with Nirmala Hindi Commentary by Dr.Bramhanand Tripathi, Chaukhamba Sanskrit Prakashan 2011 New Delhi. uttarasthana. 58/21
53. Sushruta Samhita, by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Chikitsasthana. 26/10-14
54. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Uttara tanta. 58/14.
55. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Chikitsa sthana. 7/35
56. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Chikitsa sthana. 7/37-38.
57. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, nidansthana. 1/12.
58. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, nidan sthana. 9/10.
59. Sushruta Samhita – by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Nidan sthana. 13/52-54.
60. Sushruta Samhita- by Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, nidan sthana.13/47-49.
61. Ashtangahrdya, Vagbhata, edited with Nirmala Hindi Commentary by Dr.Bramhanand Tripathi, Chaukhamba Sanskrit Prakashan 2011 New Delhi uttara sthana. 33/19-20.
62. Sushruta Samhita, By Priyavrat Sharma, Chaukhamba Vishva Bharati publication. 1st edition – 2000, Sarir sthana. 4/3

Cite this article as:

Prodhani Nazrul Islam, Parvin Ruksana. Evaluation of Male Reproductive Component in Ayurveda with its Applied Aspect. International Journal of Research in AYUSH and Pharmaceutical Sciences, 2024;8(4):1-8.

<https://doi.org/10.47070/ijraps.v8i4.163>

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr. Prodhani Nazrul Islam

Assistant Professor,
Department of Rachana Sharir,
IAMC, USTM, Meghalaya.

Email:

nazrul.prodhani60@gmail.com

Disclaimer: IJRAPS is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJRAPS cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJRAPS editor or editorial board members.