2.9 GENITO-URINARY DISEASES

2.9.1 Benign Prostatic Hypertrophy (Asthīlā)

Introduction

A condition in which a non-cancerous growth of the prostate gland makes urination frequent, difficult and uncomfortable is called benign prostatic hypertrophy (BPH). BPH rarely causes symptoms before age 40, but more than half of men in their sixties and 75% by age of 80 have some symptoms of BPH. It is a common part of ageing. Prevalence rates are 2-7% for men aged 45-49, increasing to 24% by the age of 80 years⁴⁸.

If left untreated, BPH can be a progressive disease. Incomplete voiding may result in urinary tract infections in these patients.

Descriptions of BPH are closely resembles with the clinical featutes of $Asth\bar{i}l\bar{a}$. It is one of the 13 types of $M\bar{u}tr\bar{a}gh\bar{a}ta$ (obstructive uropathies) described in Ayurveda. $Asth\bar{i}l\bar{a}$ is a mobile and elevated swelling, which obstructs the passage of urine and faeces. Generally $v\bar{a}ta$ $prak\bar{o}pa$ $\bar{a}h\bar{a}ra$ (like dry, cold and light food in insufficient quantities) and $vih\bar{a}ra$ (like starvation, over exertion and suppression of urine) aggravate $v\bar{a}ta$ $d\bar{o}sa$ which leads to $Asth\bar{i}l\bar{a}$ (Paurusa granthi $v\bar{u}ddh\bar{i}$ - Prostate gland enlargement)

Aetiology

The exact aetiology of BPH is unknown; however, ageing process is an important causative factor for BPH. In addition, prostatic growth is directly related to presence of Dihydrotestosterone (DHT) also. Initially, prostate growth takes place at puberty and again around fifth decade of life, which continues for the rest of man's life. This process involves a heterogenous and glanular hyperplasia of the prostate.



Clinical features

The most common symptoms of BPH are

- 1. Frequent urination, especially at night
- 2. Urgency of urination
- 3. Hesitancy and intermittency
- 4. Leaking or dribbling of urine
- 5. Interrupted weak stream
- 6. Bladder pain/ dysuria
- 7. Urine incontinence
- 8. Prolonged emptying
- 9. Urine retention (in severe BPH)
- 10. Hematuria

Complications

- 1. Urinary tract infections
- 2. Urinary stones
- 3. Blood in the urine
- 4. Hydronephrosis
- 5. Urinary retention

Investigations/Examination

- 1. Digital rectal Examination
- 2. Urine analysis
- 3. Ultrasound: Kidney, Ureter, Bladder
- 4. Cystoscopy
- 5. Serum Prostate Specific Antigen (PSA) Blood test
- 6. Prostate Biopsy
- 7. Uroflowmetry



Management approaches

a. Prevention of complications of BPH

- 1. Usage of wheat, old rice, *mudga* (green gram) juice, *kulattha* (horse gram), *yava* (barley) water, *rasona* (garlic), *haridrā* (turmeric), *ārdraka* (ginger), *paṭola* (snake gourd), *śigru* (drum stick), coconut, cucumber, watermelon, coriander, cumin seed, sugarcane, grapes, butter milk etc.
- 2. Consume of adequate liquids
- 3. Avoid pea, black gram, spinach, *jāmun*, mustard, sesame and excess hot and spicy food

b. Medical management

Line of treatment

- 1. Saṃśōdhana Cikitsā (Bio-cleansing therapies) /other therapeutic procedures followed by Śamana cikitsā (Palliative therapy) should be advocated. But it should be decided by physician according to the condition of the patient whether Śodhana therapy (Biocleansing therapies) is beneficial or not.
 - i. Avapīdaka snehapāna with Vastyāmayāntaka ghṛta, single dose of 200 300ml
 - ii. Avagāha sveda (Sitz bath) for 15 days with warm water or decoctions like
 - Pañca valkala kvātha
 - Triphalā kvātha
 - Daśamūla kvātha

iii. Vasti

- Uttara vasti with Varuṇādi ghṛta/ Śatāvaryādi ghṛta 30-50 ml for 3 days (Each Uttara vasti is given with a gap of three days).
- Mātrā vasti with Varunādi ghrta/ Śatāvaryādi ghrta 30-50 ml for 14 days

The dosage (per dose) should be decided by physician according to severity of the disease and condition of the patient.

2. Drug therapy



SINGLE DRUGS

Drug	Dosage (per dose)	MOA ^{\$} / Vehicle	Duration*
Gokṣura (Tribulus terrestris Linn.) cūrṇa	3-6gm	Water	15 days
Paṣāṇabheda (Bergenia ligulata (Wall.) Engl.) cūrṇa	1 -3 gm	Water	15 days
Harītakī (Terminalia chebula Retz) cūrņa	3 gm	Lukewarm water at bed time	15 days
Varuṇa (Crataeva nurvola Buch. and Ham.) kvātha	10-20 ml	Water	15 days
Punarnavā (Boerhavia diffusa Linn.) kvātha	10-20 ml	Water	15 days

COMPOUND FORMULATIONS

Drug	Dosage (per dose)	MOA ^s / Vehicle	Duration*
Tṛṇapañcamūla kvātha	10-50 gm	Water	15 days
Bṛhatyādi kaṣāya	15-30ml	Water	15 days
Gokṣurādi guggulu	1-1.5 gm	Luke warm water/ Mustaka kvātha (decoction made from Cyperus rotundus)	15 days
Kāñcanāra guggulu	1-1.5gm	Luke warm water	15 days
Chandraprabhā vaṭā	1-1.5 gm	Water	15 days
Śveta parpaṭ ī	750-1250 mg	Water/ <i>Nārikela jala</i> (Coconut water)	15 days
Dhānvantara ghṛta	15 ml	Warm water	15 days
Varuṇādi ghṛta	15-30 ml	for uttar Vasti	3 days
Śatāvaryādi ghṛta	15-30 ml	for uttar Vasti	3 days
Candanāsava	10-20 ml	Water	15 days
Punarnavāsava	10-20 ml	Water	15 days



\$MOA - Mode of administration

* Initially 2 times in a day after meal for 15 days followed by condition of patient and physician's direction.

NOTE: Out of the drugs mentioned above any one of the drug or in the combination may be prescribed by the physician. The duration of the treatment may vary from patient to patient. Physician should decide the dosage (per dose) and duration of the therapy based on the clinical findings and response to therapy.

- **c. Yogic Practices** The following *yogic* practices are beneficial in BPH; however, these should be performed only under the guidance of qualified *Yoga therapist*. Duration should be decided by the *Yoga therapist*.
 - 1. Vajrāsana, Siddhāsana, Gomukhāsana, Pādānguṣṭhāsana, Guptāsana, Paścimottānāsana, Sarvāṅgāsana, Pavanamuktāsana etc.
 - 2. Aśvini mudrā, Mūlabandha, Nādī śodhana, Śītalī prāṇāyāma

Counselling - Advice the patient to

- 1. Urinate when ever the urge and at regular intervals
- 2. Take plenty of fluids, but in divided quantities at regular intervals
- 3. Try to evacuate bladder completely
- 4. Practice kegel exercise: simply tighten and relax the pubo-coccygeus muscles for 3 seconds about 20-30 times a day for strengthening the pelvic floor
- 5. Practice yoga to reduce stress
- 6. Restrict high caloric and high fat diet
- 7. Avoid drinking large amounts of fluid at one time and especially at night
- 8. Avoid alcohol and caffee, especially after dinner.
- 9. Avoid drinking water within 2 hours before going to bed
- 10. Try to avoid decongestants and antihistamines, which can worsen BPH symptoms

Indications for referral

- 1. Incontinence of urine
- 2. Recurrent urinary infection
- 3. Recurrent blood in the urine
- 4. Urinary retention



COSTING DETAILS

Approx. costing of BPH management

S.No.	Medicine	Requirement	Unit	Rate in Rs.	Cost in Rs.
1.	Gōkṣura cūrṇa	90-180	gm	0.3	27-54
2.	Pāṣāṇabhēda cūrṇa	90-180	gm	0.7	63-126
3.	Harītakī cūrņa	90	gm	0.27	24.3
4.	Varuṇa kvātha	300-600	ml	0.3	90-180
5.	Punarnavā kvātha	300-600	ml	0.3	90-180
6.	Tṛaṇapañcamūla kvātha	100-150	gm	0.28	28-42
7.	Bṛhatyādi kaṣāya	300-600	ml	0.23	69-138
8.	Gokṣurādi guggulu	30-60	gm	1.25	38-72
9.	Kāñcanāra guggulu	30-60	gm	1.2	36-72
10.	Candraprabhā vaṭi	30-60	gm	2	60-120
11.	Śveta parpaṭi	22.5-37.5	gm	3	68-104
12.	Dhānvantara ghṛta	450	ml	0.45	210
13.	Varuṇādi ghṛta	45-90	ml	0.41	19-38
14.	Vastyāmayānthaka ghṛta	200-300	ml	0.625	125-188
15.	Śatāvaryādi ghṛta	45-90	ml	0.625	28.5-57
16.	Candanāsava	300-600	ml	0.118	36-71
17.	Punarnavāsava	300-600	ml	0.127	38-76

Approx. costing of Pañcakarma procedure in BPH **

S.No.	Pañcakarma procedure	Days	Rate in Rs./ day	Cost in Rs.
1.	Avagāha sveda (Sitz bath)	15	100	1500
2.	Uttara vasti	3	100	300
3.	Mātrā vasti	7	100	700

