

Herbal Remedies for Management of Constipation and its Ayurvedic Perspectives.

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Abstract: Constipation is a condition in which an individual experiences uncomfortable or infrequent bowel movements. Ayurveda treats constipation as a problem arising due to the predominance of the vata dosha. In fact, all people with the vata constitution have this problem to some extent or the other. From an Ayurvedic point of view, dietary bad habits are the main cause of constipation. The present communication deals with the management of constipation with its Ayurvedic perspectives and role of medicinal plant as corrective measure in it.

INTRODUCTION

Constipation is a condition in which an individual experiences uncomfortable or infrequent bowel movements. Generally, a person is considered to be constipated when bowel movements result in the passage of small amounts of hard and dry stool, usually fewer than three times a week (Longstreth et al., 2006). It is the most common gastrointestinal complaint all over the world resulting in over two million reported cases annually (Luscombe, 1999). Constipation is a common complaint often resulting from inordinate expectation of regularity in bowel conscious individuals. A review of patient's habits often reveals contributory and correctable causes, such as insufficient dietary roughage, lack of exercise, suppression of defecatory urges arising at inconvenient moments, inadequate time for full defecation and prolong travel. In spite of appropriate adjustment to these patterns and reassurance, patients often fail to relieve the problem of constipation. Most cases of chronic constipation arise from habitual neglect of afferent impulses, failure to initiate defecation and accumulation of large, dry faecal masses in the rectum.

It is evident from WHO report that more than 80% of world population specially in developing in develop countries dependent on herbal medicine. Several plants have been documented in Traditional Systems of China, Japan, Sri Lanka, Korea, Bhutan and other countries.

In India we have well recognized Tradition Systems of Medicine (Ayurveda, Siddha, Unani and Homeopathy). A large number of herbs/formulations have been mentioned for treatment of different diseases including constipation (Table 1 and table 2).

Table 1: Combination available in Indian market to combat constipation

Patented herbal	Classical ayurvedic formulations
Anuloma (sagar)	Abhayarist
Bowelite(Gufic)	Mrdvikarista
Fibrill (Lupin)	Trivrt lehyam
Fibron (Unjha)	Avipattikara churna
Gibolic capsules(Cadila)	Panchasakar churna
Herbolax cap/tab (Himalaya)	Ichhabhedhi rasa
Jeeva Lax cap (Sanjeevani)	
Kabjeena (Vyas)	
Kabzhar (Baidyanath)	
Kayam churna (Sheth bros)	
Softovac (Lupin)	

Ayurveda, the science of life, is a comprehensive medical system that has been the traditional system of healthcare in India for more than 5000 years. This medical system was well established around 2500 to 600 BC, when it evolved into 2 schools: the School of Physicians and the School of Surgeons, similar to allopathy. Charak Samhita, Susrut Samhita, and Ashtang Hridaya Samhita are the Senior Triad

Table 2: Herbs used for constipation

English name	Botanical Name
Agave	<i>Agave americana</i>
Alfalfa	<i>Medicago sativa</i>
Aloe	<i>Aloe vera</i>
Apple	<i>Prunus mallus</i>
Asafetida	<i>Ferula foetida</i>
Asparagus	<i>Asparagus recemosus</i>
Basil	<i>Ocimum basilicum</i>
Blackthorn	<i>Prunus spinosa</i>
Calamus root	<i>Acorus calamus</i>
Calendula	<i>Calendula officinalis</i>
Cascara	<i>Cascara sagrada</i>
Castor bean	<i>Ricinus cummunis</i>
Chickory	<i>Cichorium intybus</i>
Clover, red, wild	<i>Trifolium</i>
Coffee-tree, Kentucky	<i>Coffea Arabica</i>
Cucumber	<i>Cucumis sativus</i>
Date	<i>Phoenix dactylifera</i>
Fennel, seed	<i>Foeniculum vulgare</i>
Fig	<i>Ficus carica</i>
Flaxseed	<i>Linum usitatissimum</i>
Fumitory	<i>Fumaria parviflora</i>
Ginger	<i>Zingiber officinale</i>
Goldenseal	<i>Berberis aristata</i>
Grape, Oregon, wild	<i>Vitis vinefera</i>
Indigo, wild	<i>Baptisia tinctoria</i>
Licorice	<i>Glycyrrhiza glabra</i>
Mulberry	<i>Morus indicus</i>
Oak, white	<i>Calotropis procera</i>
Olive	<i>Olea spp.</i>
Origanum	<i>Origanum vulgare</i>
Peach tree	<i>Prunus persica</i>
Psyllium	<i>Plantago ovata</i>
Radish	<i>Raphanus sativus</i>
Rhubarb root	<i>Rheum officinale</i>
Rowan	<i>Clausena pentafilla</i>
Senega	<i>Polygala senega</i>
Senna	<i>Cassia angustifolia</i>
Sesame seeds	<i>Sesamum indicum</i>
Soapwort	<i>Soponaria officinalis</i>
Spurge	<i>Euphorbia</i>
Sunflower, seed	<i>Helianthus annus</i>
Tamarind	<i>Tamarindus indicus</i>
Tuja	<i>Tuja officinalis</i>

texts, and Madhav Nidan Samhita, Sarangdhar Samhita, and Bhavprakash Samhita are the Junior Triad texts around 600 BC.

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CONSTIPATION MANAGEMENT AS MENTIONED IN CLASSICAL AYURVEDIC TEXT

Constipation - Causes from an Ayurvedic Point of View

Ayurveda treats constipation as a problem arising due to the predominance of the *vata dosha*. In fact, all people with the *vata* constitution have this problem to some extent or the other. From an Ayurvedic point of view, dietary bad habits are the main cause of constipation. The following are some of the dietary factors that lead to constipation - Eating at different times each day, Eating too late than the normal time, Eating food that is difficult to digest, Eating food without roughage (or foods that contain fiber content), Eating mostly dry foods, Drinking too many beverages like tea and coffee, Drinking too many cold drinks, Not drinking enough water. Apart from these, Ayurveda has also pinpointed various environmental and behavioral factors that can lead to constipation. The following are these environmental and behavioral factors - Vices like smoking, Staying awake till late at night, Sleeplessness or insomnia, Mental worries and tensions, Feelings of guilt and fear and Age.

Constipation - Symptoms from an Ayurvedic Point of View

Depending on the constitution of the person, there are different observed symptoms of constipation. The following are some of the symptoms:-

1. *Vata dosha* symptoms - The first symptom is a browning of the tongue, which cannot be cleaned easily. These people also have occasional feelings of uneasiness in their stomachs with flatulence. Stools are hard to eliminate, and food takes a long time to get digested properly.
2. *Pitta dosha* symptoms - The person will observe slightly yellowish stools and there will be a burning sensation in the anal canal as they eliminate.
3. *Kapha dosha* symptoms - The colon feels heavy and there is low digestive fire. The person will feel lethargic most of the time. The person will also eliminate faint colored stools which are almost white in color. There is a strong feeling of gas and flatulence. Bad breath (halitosis) is also a common problem in this type.

Types of constipation

Constipation can be broadly classified into two types:

- a) Casual or temporary: can be caused by indigestion, overeating, contaminated food or bacterial infection.
- b) Chronic or habitual: Occurs largely in the elderly usually due to the loss of tonality in the sphincter muscles. It is also presented by persons suffering from piles or haemorrhoidal tissues.

Different types of oral laxatives to manage constipation as mentioned in Ayurveda

Ayurveda describes in Sharangdhara Samhita (one among Laghutrayee; in the beginning of thirteenth century) various herbs and their preparations for restoring normal evacuation of GI tract. These include – Carminative, Laxative, Purgative and Cathartics, whose details are listed in Table:-

Ayurvedic Remedies for Constipation

- In case of constipation one should be very careful with the use of laxatives as they can often weaken the colon due to their strong action. They should be taken only in acute conditions. It is better to use simple diet remedies. A lot can be recovered by proper eating habits.
- Eating freshly cooked food is helpful. Spices like cumin seeds, coriander, turmeric powder, fennel and asafetida is good as it makes the food easily digestive.
- Proper chewing of food is very important.
- Take plenty of leafy vegetables and salads.
- Drinking a glass of warm milk at the time of going to bed helps in evacuation, the next morning. In case of severe constipation mixing two teaspoonful of castor oil in the milk is very helpful.
- Taking lemon juice mixed with warm water two or three times a day also cleans the bowels.
- Very common and popular Ayurvedic medicine for constipation used by many Ayurvedic physicians is *Triphala Churna/Triphala tablets*. It is a powder made by grinding three kinds of fruits or herbs. This powder is now available in many western countries. 3 to 6 gms. of this powder - OR - 2- 3 tablets taken at the time going to bed with warm water or milk helps in having a clean bowel motion the next morning.
- A glass lukewarm milk with 10 gram ghee at bed time will also help
- ‘Gandharva Haritaki Churna / tablets’ at bed time with lukewarm water another helpful remedy.

Ayurvedic Remedies for Constipation

- Take 3 -4 teaspoons of Abhyarishta with equal quantity of water twice a day after meals.
- Take 1 - 2 teaspoons of Panchasakar churna with lukewarm water.
- Take 1 - 2 teaspoons of Avipattikar Churna (powder) with water or milk twice a day.
- Take 1 tablet of Gandhak Vati with hot water after meals.
- Take 1 - 2 tablets of Virechani with warm water or milk at bed time.
- Take 1 - 2 tablets of Gandharvaharitaki / Triphala with warm water at bed time.

Ayurveda Diet for person having Constipation

- Take ample fruits, fruit juices, salads, leafy and green vegetables. Whole grain bread can be taken. Unpolished rice can be taken moderately.
- Fried foods and beans should be avoided. Vegetables like cabbage, cauliflower, and broccoli are not good. Nuts and dry fruits should also be avoided.
- It is very much necessary to form a habit of evacuating early morning. Regular physical exercise is also important for having clear bowels. One should try to have relaxed mind, free from anxiety, stress etc.

Natural remedies to treat constipation

Laxatives, even herbal laxatives, should be used with caution. Other natural remedies should be tried first. The gentlest remedies for constipation include increased movement and exercise, certain yoga

S.No.	Action	Candidate herb Mentioned in Ayurveda	Botanical details	Mechanism of action mentioned in Ayurveda	Chemicals present
1.	Carminative	Hatitaki	<i>Terminalia chebula</i> (Combretaceae) It is also called as Chebulic Myrobalan; Sanskrit: haritaki; native to southern Asia from India and Nepal east to southwestern China (Yunnan), and south to Sri Lanka, Malaysia and Vietnam. It is a deciduous tree growing to 30 m tall, with a trunk up to 1 m diameter. The leaves are alternate to subopposite in arrangement, oval, 7-18 cm long and 4.5-10 cm broad with a 1-3 cm petiole. The fruit is drupe-like, 2-4.5 cm long and 1.2-2.5 cm broad, blackish, with five longitudinal ridges.	It will digest the undigested residue of food material, inducing/ restoring normal peristaltic movement of intestine by governing vata. It either prevents formation of gas in the gastrointestinal tract or facilitates the expulsion of said gas, thereby combating flatulence. Its fruit has digestive, anti-inflammatory, anthelmintic and restorative properties with additional benefit in flatulence, constipation and piles.	The myrobalan fruit has tannin (24-32%). The chief constituents of this tannin is Chebulagic acid, Chebulinic acid, Corilagin and gallic acid.
2.	Laxative	Amaltas	<i>Cassia fistula</i> , (Fabaceae) native to southern Asia, from southern Pakistan east through India It is a popular ornamental plant and is an herbal medicine. Also called as The Golden Shower Tree is a medium-sized tree growing to 10–20 m (33–66 ft) tall with fast growth. The leaves are deciduous, 15–60 cm (6–24 in) long, pinnate with 3–8 pairs of leaflets, each leaflet 7–21 cm (3–8 inches) long and 4–9 cm (1.5–3.5 in) broad. The flowers are produced in pendulous racemes 20–40 cm (8–15 in) long, each flower 4–7 cm diameter with five yellow petals of equal size and shape. The fruit is a legume, 30–60 cm (12–23 in) long and 1.5–2.5 cm (0.5–1 in) broad, with a pungent odor and containing several seeds.	Laxatives work to hasten the elimination of undigested remains of food in the large intestine and colon by stimulating evacuation of the bowels by causing looseness or relaxation, especially of the bowels. as contact laxatives, encourage bowel movements by acting on the intestinal wall. They increase the muscle contractions that move along the stool mass. Natural Stimulant laxatives are products like senna, <i>Cascara sagrada</i> , <i>Cassia fistula</i> , etc.	phenolic such as anthraquinones, flavonoids and flavan-3-ol derivatives.
3.	Purgative	Kutki	<i>Picrorhiza kurroa</i> Other Names: titka kul (Ayurvedic), picrorhiza, kutki, katuka, kutka (Hindu, Sanskrit), kadu (Gujarati). It grows in the hilly regions of the North-Western Himalayan region from Kashmir to Kumaun and Garhwal regions of India and Nepal. It is found at 3,000 – 5,000 meters (7-14,000 feet) of elevation, growing in rocky crevices and moist, sandy soil. The bitter tasting roots of picrorhiza kurroa are hard, about 6-10 inches in length, and creeping. The leaves are 2-4 inches long, oval in shape with a sharp apex, flat, and serrate. The flowers are white or pale purple on a long spike, blooming in June through August. The fruit is ½ inch long and oval in shape. The rhizome of picrorhiza kurroa is manually harvested in October through December. Like many species of medicinal plants, picrorhiza is threatened to near extinction due to over-harvesting.	These are strongly laxative They are divided according to their nature into laxatives, simple, drastic, and saline purgatives, hydragogues (which encourage bowel movements by drawing water into the bowel from surrounding body tissues. This provides a soft stool mass and increased bowel action. There are three types of hyperosmotic laxatives taken by mouth-the saline, the lactulose, and the polymer types.), and cholagogues (by excreting more bile). It acts as antibacterial, antiperiodic, cathartic (in large doses), laxative(in smaller doses) stomachic and bitter tonic, hepatoprotective, anticholestatic (relieves obstruction of bile salts), anti-inflammatory, anti-allergy, antioxidant; modulates the immune system and liver enzyme levels. Cathartics are substances which accelerates defecation.	The root contains a number of very bitter glucosides including kitkin and picrorhizin, nine cucurbitacin glycosides, D-mannitol, benetic acid, kutkisterol,
4.	Cathartics	Trivrit	<i>Operculina turpethum</i> (Convolvulaceae) (syn. Ipomoea turpethum) is known commonly as turpeth, and St. Thomas lidpod. It is perennial herbaceous, hairy vines growing 4 to 5 meter in length, endemic to India. The leaves are alternate, very variable in shape, ovate, oblong and truncate or cordate at the base. The flowers are large, axillary and solitary. Fruit is a capsule with conspicuous enlarged sepals and thickened pedicels. It is used as an herbal Cathartics		It contains glucoside Turpethin and resin similar to Jalap resin. It contains a wide variety of phyto constituents, which are useful in treatment of different ailments and includes glycosidic resin, coumarins, beta-sitosterol, and essential oils

postures, increase of fluid intake, and dietary changes including increased fiber and fruit. Apple-pear juice is also highly recommended; and stewed fruits like prunes, figs, or dates especially when mixed in licorice tea make a tasty laxative snack.

Herbal laxatives

There are three classes of herbal laxatives - bulk, mild (but not bulk) and purgative. The bulk herbs may need 12 to 24 hours to encourage a bowel movement, and irritating herbs somewhat less time, perhaps 6 to 12 hours.

Bulk laxatives

Bulk laxatives are the gentlest for occasional constipation. Flaxseed (also known as linseed), psyllium, and fenugreek are three well-known herbal bulk laxatives. One can take one tablespoon of whole seeds two to three times a day, followed by two cups of liquid. To help bulk laxatives do their job properly, one must drink a lot of water, otherwise gastrointestinal obstructions can occur.

Purgative or cathartic laxatives

Purgative laxatives are the category most utilized; and purgative herbs are used in health food store formulations and in many commercial over-the-counter laxatives. This group includes aloe, buckthorn, cascara sagrada, rhubarb, and senna. All the herbs in this category contain anthraquinones, strong and irritating chemical compounds that force the bowels to evacuate. They should be used only as a last resort.

Pregnant or nursing mothers should not use these irritants, nor should people with gastrointestinal problems including ulcers, ulcerative colitis, irritable bowel syndrome, and hemorrhoids.

Avoid the prolonged use of purgative laxatives. The continual use can cause lazy bowel syndrome. When this negative cycle develops the result is a sluggish digestive system unable to evacuate without the use of more laxatives. Studies also show that chronic over-use of constipation relieving drugs can lead to disturbances of the body's electrolyte equilibrium. In turn this can result in potassium deficiency and a concomitant problem for those who are taking heart medications.

The gentlest of this class of cathartic laxative herbs is cascara sagrada, known as "sacred bark" from a Native American tree (*Rhamnus purshiana*), try rhubarb root (*Rheum officinale*). It is one of the safest and least violent, but it should be reserved for occasional use only. Senna (*Cassia acutifolia* & *C. angustifolia*) is a bit stronger and also quite popular. It, too, is a main ingredient of many over-the-counter laxatives.

Another herb in this category, aloe, is even more problematic. Its popularity has recently increased and it is a wonderful herb to use externally for skin care. But because of its use, its name is becoming more known, and some people assume that because it is safe for one purpose, that it is ok to try for another reason. A recent magazine article suggested drinking aloe vera juice on a daily basis. But many western herbalists do not recommend aloe as a laxative because it is too strong, although it has a history of use in Ayurvedic medicine.

Herbal Laxatives

Herbal laxatives promote bowel activity with mild purgation. They are used when there is constipation, insufficient fiber in the diet,

blood toxicity, gallstones, hypertension, a skin condition caused by insufficient elimination, or an infection in which cleansing of the bowel is needed.

The most frequently used laxative herb is cascara sagrada. Senna, the second most frequently used one, is actually a purgative; it is stronger and harsher (only 1 cup of the tea daily).

Other laxatives include aloe vera, licorice root, psyllium seed, wahoo bark, and dandelion root (when there is liver involvement). They can be combined or taken individually. Some, like cascara and senna, operate by purging the bowels; others (such as psyllium seed, flaxseed, and agar agar) provide a soft gel-like bulk that slides it out (see demulcents, below). During fevers, these laxative herbs help cool the system by eliminating heat from the intestines.

Table 1 contains a list of herbs that promotes bowel action: buckthorn bark, cleavers, agar agar, boneset, flaxseed, licorice root, cascara sagrada, elder, mandrake, motherwort, Oregon grape root, goldenseal, senna, safflower, yellow dock, and peach bark.

Demulcents

Demulcent herbs bathe and lubricate the intestines and help expel contents, especially when the fecal matter in the bowel is dry. The best ones are psyllium seed, flaxseed, slippery elm, and agar agar. Here are several other demulcents: fenugreek, licorice root, comfrey root, aloe vera, and mullein.

Herbal Enema

Instead of a laxative, an herbal enema can be taken. A peppermint tea enema is one of the best.

Carminatives

Purgative herbs should be combined with carminative native herbs, to lessen griping. Carminatives contain volatile oils which stimulate the expulsion of flatus (gas) from the bowels and peristalsis. The best is peppermint. Here are several other carminatives: angelica, anise, caraway, catnip, celery, chamomile, coriander, cumin, dill, fennel, garlic, ginger, myrrh, saffras, thyme, and valerian.

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