

# An Ayurvedic Perspective of Hrid Dhauti in Shatkarmas and its Impact upon Human Physiology

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**Abstract.** Yoga is an ancient psycho-physical discipline used for the spiritual elevation from centuries. It starts with the sustainability and health of the body as it is the medium of human existence. Hence Yogic science emphasizes cleansing processes for the purification before the practice of asana or pranayama. It is also essential to gain the benefits of further practices such as *Asana* and *Dhyana*. Among the cleansing processes, *Dhauti* is a jewel. It is classified into four categories, *Anatar dhauti* (Digestive Track), *Danta* (Mouth), *Hrid* (Chest), and *Moola shodhana* (Rectum). In which *Hrid Dhauti* is prominent one. Here *Hrid* means heart, while *Dhauti* refers to wash organs. It is closely associated with the heart and its nearby organs such as stomach. These *Hrid Dhauti* is further classified into three methods, *Danda* (stem), *Vamana* (water vomiting) and *Vastra* (cloth). It consists of cleaning the esophagus and stomach in three ways and helps in the management of respiratory system and upper digestive system aliments. It also cleans the gastrointestinal tract from mouth to the stomach. Now it is essential to study the yogic techniques from the ayurvedic perspective. This study has been conducted to explore the physiological effect of *Hrid Dhauti* from the Ayurveda's perspective.

Keywords. Hrid Dhauti, Human Physiology, Danda Dhauti, Vaman Dhauti, Vastra Dhauti

### Introduction

*Shatkarmas* are techniques of Yoga used to clean the body. They are called *shatkarmas* because they are six (shat in Sanskrit) in number. These techniques are used to clean some systems of the body. These systems include respiratory system, digestive system & excretory system. After taking bath dead skin cells and other pollutants are removed from skin.

*Shatkarmas work* on cleaning inside of the body. The processes of *shatkarmas* are done to remove unnecessary particulates from the body and make it light & energetic. Moreover, when body is light it helps to practice asana and pranayama in the better way, makes them more effective (1). One of *Shatkarmaas* is *Dhauti* in which, *Hrid dhauti* is very popular among Yogic practices.

हृद्धौतिं त्रिविधां कुर्याद्वण्डवमनवाससा - Gheranda Samhita 1/35 (2). The word 'Hrid' means 'heart' or the chest region, and these practices are concerned with purifying this region of the body. The Hrid Dhauti technique is divided into three Danda Dhauti, Vaman Dhauti and Vastra Dhauti. Danda Dhauti is the method of cleaning the esophagus, the food pipe, from the mouth to the stomach, by inserting a specially prepared stem. The stick is usually the soft core of a banana tree stem, being about half an inch in a d iameter and two feet long. The stem is carefully inserted down the throat until the end of it reaches the stomach. Then it is slowly removed. It removes mucus, phlegm, acidity and general impurities from the esophagus. Vaman Dhauti or Vyaghra Kriya is the second practice of Hrid Dhauti. 'Vaman' is 'to vomit' 'vyaghra' means 'tiger'. Just as a tiger regurgitates its food a couple of hours after eating; in this practice person vomits the food from the stomach three hours after a meal. Vastra Dhauti is a practice in which a long strip of moist cotton cloth is swallowed into the stomach. After retaining it for some time, it is pulled out thereby cleaning the stomach. All these functions of the GIT (Gastro Intestinal Tract) are achieved due to the activation of vagus nerve (3).

In *hrid dhauti danda, vaman* and *vastra* help to balance *three doshas vata, pitta and kapha.* A balanced proportion of these three facilitates body functions but, if there is excess of one or shortage of another, ailments develop due to overheating or not enough heat in the body. Hence, before commencing pranayama, any imbalance in the *doshas* should be removed (4). *Hrid dhauti* balances *pachaka-pitta, kledaka-kapha* and *saman-vata* in stomach. It also prevents from indigestion. And helps to perform *asana* and *pranayam* and so, that body become free and light. And when *kapaha dosha* is removed, a person can easily free from diseases and can perform asana and pranayama well (5).

### Danda Dhauti

रम्भादण्डं हरिद्दन्डं वेत्रदण्डं तथैव च। ह्रन्मध्ये चालयित्वा तु पुनः प्रत्याहरेच्छनै: ॥ 36 ॥ कफपित्तं तथा क्लेदं रेचये दूर्ध्ववर्त्मना। दण्डधौतिविधानेन हृद्रोगं नाशयेद् ध्रुवम् ॥ 37 ॥ - Gheranda Samhita 1/36-37 (6)

This is the first practice of hrid dhauti. A stalk of turmeric and thrust it slowly in to esophagus and then draw it out slowly. By this process all the phlegm, bile and other impurities are expelled out of mouth and prevents from heart diseases (6).

### Vata, Pitta and Kapha Doshas

*Vata* means air and *pitta* means fire and kapha means water. Due to vata *dosha* or lack of oxygen in heart called ischemia means degeneration due to lack of oxygen and Ischemic Heart Diseases (IHD) means degeneration in heart muscle due to lack of oxygen (7). After *danda dhauti* cardiac muscle well exercised and oxygen increase in cardiac muscle. So, it prevent from ischemia. Angina is a type of chest pain caused by reduced blood flow to the heart. After *danda dhauti* it increases blood flow in coronary artery and prevent from angina chest pain.

#### Vata

It governs peristaltic movement of the digestive system the stomach and esophagus (5). Due to not proper peristalsis movement in esophagus it can cause Primary idiopathic motor disorders that include achalasia (esophageal fail to open during swallowing), diffuse esophageal spasm, nutcracker esophagus, hypertensive Lower Esophageal Sphincter (LES) and nonspecific esophageal motility disorders. It can cause dysphagia (difficulty swallowing), chest pain, heartburn and regurgitation are the most common symptoms of hypertensive lower esophageal sphincter (7). Danda dhauti increases peristalsis movement in circular and longitudinal muscle. It strengths the muscle and improves motility. Danda dhauti stimulate vague nerve and strengthen the lower esophageal sphincter and prevent from achalasia and gastro-esophageal reflux diseases (8).

### Pachaka-pitta

It is responsible for gastric fire in stomach (9). Due to pitta disorder it can create hyperacidity, also known as gastritis or acid reflux, is the inflammation of the stomach's lining that is usually caused by bacterial infection or other unhealthy lifestyle habits. In gastritis bitter test in mouth can also occurred. After a danda dhauti it removes extra acid secretion in stomach. So, prevents from hyperacidity. Acid reflux causes heartburn and pain in the abdomen area. Acid reflux is when the contents of the stomach go back into the esophagus backwards. GERD (Gastro Esophageal Reflux Disease). GERD can cause chronic pain in the abdomen (10). Danda dhauti with the help of the water it removes extra acid secretion in the stomach and esophagus. Prevent from heart burn sensation.

### Sadhaka-Pitta

It governs emotions such as contentment, memory, intelligence. It is locate in the heart. It helps to bulge out suppressed emotions and feeling. During *danda dhauti* when water comes out through siphon action, it also helps to blur out suppressed emotions (11).

### Kledak-kapha

It remains in mouth. Moisture and lubricate the food. It removes the bacteria of mouth & increase the efficiency of salivary glands. It increases saliva secretion by stimulating parotid glands, submandibular gland and sublingual glands. This helps to prevent damage to the mucus membrane by rough or intake of abrasive food (12).

Avalambak kapha also remains in chest and heart region. It remains as a pericardial and plural fluid in the chest. Due to extra mucus secretion in bronchi, when bronchi can irritated or inflamed extra mucus secretion cause bronchitis. The inside walls of the airways in lungs become inflamed and swollen. In extra, membranes in the airway linings may secrete excess mucus. Bronchioles become swollen. The result is an asthma attack. When *danda dhauti* is performed, the intra thoracic negative pressure is created. Mucus comes out from bronchioles. *Danda* helps to remove extra mucus secretion and prevent from asthma attack (13).

### Danda Dhauti and heart physiology

During *danda dhauti* parasympathetic innervations of the heart is partially controlled by the vagus nerve. Vagus and spinal ganglionic nerves mediate the lowering of the heart rate and reducing the force of contraction of the heart, vasoconstriction of the coronary arteries.

In heart failure, particularly when cardiac output is significantly reduced, arterial vasoconstriction helps to maintain arterial pressure. *Danda dhauti* helps to prevent from heart diseases by parasympathetic intervention of vagus nerve (14).

In Indian tradition banana stem was used. Swami Kuvalyananda popularized the use of Indian rubber

tube. It refers to cleaning by rubber tube. For this purpose, lukewarm saline water is drunk, a rubber tube (*danda*), which is about 1 centimeter in diameter and about a meter long, is slowly pushed down into the stomach. When it reaches the stomach, practitioner bends forward. All the water comes out by siphon action. The stomach should be suck in and bulge out (15).

Trachea is located in front of esophagus. When the rubber tube enters in esophagus it stimulates the trachea and excess mucosa in bronchi and prevents smooth muscle from contraction with bronchioles. So, it prevent from cough, cold, noses block, abnormal breath, asthma, Chronic Obstructive Pulmonary Disease (COPD), bronchitis and psychogenic diseases (e.g. anxiety). Gastro-Esophageal Reflux Disease (GERD) it causes acid reflex, chest pain and after long times it turns it to heart attack. So, hrid dhauti prevents from gastroesophageal reflux disease (GERD) and also prevents from heart diseases (16). Danda Dhauti helps to remove mucus secretions and acid water from the stomach thus bringing down the amount of expectoration in the longer run (Bhole, 1967) (17).

### Vaman Dhauti

## भोजनान्ते पिबेद्वारि चाकण्ठ पूरितं सुधी:। उर्ध्वां द्रुष्टिं क्षणं कृत्वा तज्जलं वमयेत् पुनः ।। 38 ।। नित्यामभ्यासयोगेन कफपित्तं निवारयेत् ।। 39 ।। (18)

This is the second practice of *hrid dhauti*. '*Vaman*' is 'to vomit' '*vyaghra*' means 'tiger'. Just as a tiger regurgitates its food a couple of hours after eating; in this practice a person vomits the food from the stomach three hours after a m eal. Then a person tickles the back of the throat with the first two fingers to induce *vomiting*. After eating diet, the food first goes to the stomach. Then the food goes into the small intestine for further digestion and absorption. The liquidated food gets released into the intestine, small particles of undigested food remain on the lining of the stomach. But, this may get flushed down when someone drinks water or takes the next meal. But during that time, it can causes irritation and produces gas. But, during *vaman dhauti* it flushed whole stomach with saline water and remove extra food particles that remain in stomach line and remove extra HCL (Hydrochloric Acid) secretion in stomach. The salt water also reduces the secretion of acid from the glands in the stomach. So, it reduces gas and hyper acidity. This practice helps in opening up the sphincter, inhibiting the excess gastric secretions, encouraging peristalsis (19).

It also helps to prevents from increasing bad cholesterol in arteries thus prevents from atherosclerosis, and also prevents of heart diseases and avoid the risk of heart attack (20).

This is a technique for cleaning the digestive tract from the stomach to the mouth. It involves drinking warm, salty water until the stomach become full and then voluntarily expelling it through the mouth. It tones and stimulates all the abdominal organs by inducing strong muscular contraction in stomach wall (21).

These techniques help to release pent up emotions and emotional blocks and feelings of heaviness in the heart caused by inner and external conflict and pressures (22). It removes impurities in the stomach and extra acid secretion. The salt water also reduces the secretion of acid from the glands in the stomach. All these are important factors in preventing indigestion and obtaining the best possible assimilation of nutrients into the body as well as eliminating other digestive ailments, and through this way it can reduce obesity and related disorders. This practice helps in opening up t he sphincter, inhibiting the excess gastric secretions, encouraging peristalsis (23).

### Vastra Dhauti

Vastra dhauti is a fine piece of well stitched muslin cloth, which is three inches wide and 15 feet long, used for this practice and it is ensured that no pieces of loose thread bangs from its sides. As the cloth reaches the stomach peristaltic (churning) movement starts and the cloth takes shape of ball. Due to churning movements, mucus gets stick to the cloth. Thus it helps to eliminate old and extra deposits of mucus attached along the line of stomach and esophagus (food pipe). It also helps to eliminate acidic material from the stomach. It improves blood circulation in the mouth, throat, esophagus and stomach by frequent scrubbing action of the vatra dhauti. It helps to gain control over autonomic nervous to a limited degree by the action of controlling natural force of vomiting during the practice (24). Stomach is gently rubbed against the cloth and massaged. Large amount of mucus and bile are brought out in *dhauti* (25). That's why in Gherand Smhita, Maharshi Gherand said,

चतुरङ्गुलविस्तारं सूक्ष्मवस्त्रं शनैर्प्रसेत् । पुनः प्रत्याहरेदेतत्प्रोच्यते धौतिकर्मकम् ॥ 40 ॥ गुल्मज्वरप्लीहकुष्ठं कफपित्तं विनश्यति । आरोग्यं बलपुष्टिश्च भवेत्तस्य दिने दिने ॥ 41 ॥ - Gheranda Samhita 1/40-41 (26)

Through high pressure created in the upper abdominal cavity in *dhauti* exerts stimulating effects on viscera, liver, spleen, pancreas etc. Through blood circulation it removes impurities in the skin and prevent from skin diseases. It is very good exercise for inactive liver and sluggish pancreas and enlarged spleen.

It is postulated that the massaging action of *Vastra-dhauti* influences the pepsin secretion and through it, by feed-back mechanism, stimulate the adrenocorticoid activity. Then after, the tube should gently be removed. Increase in uro-pepsin excretion is found in the practice of *dhauti*. It is reflection of the increased production of pepsin in the stomach wall. It prevents from Gastro Esophageal Reflux Disease (GERD) (17).

### Discussion

This practice hrid dhauti effects on heart and chest region. Dhauti karma is washing the complete alimentary canal. Different organs are connected on the way of the alimentary canal. Thus the practice of dhauti kriya is beneficial in many ways. Mucus in a human body is responsible for diseases like the spleen enlargement, leprosy, cough and asthma. Dhauti eliminates excessive mucus from the stomach. Hence, dhauti kills coughs, asthma, leprosy diseases. Dhauti flush out rests food residue from the stomach, hence it increases the efficiency of the digestive & respiratory system. Dhauti balances kapha, pitta & vata doshas in the body. The practice of dhauti karma removes different infectious bacteria from the stomach, hence reducing constipation, poor digestion problem. The consistent practice of *dhauti karma* helps to cure the acidity problem. Functioning of *dhauti* also helps to glow skin & removes dark circle. It removes the bacteria of mouth & increases the efficiency of salivary glands (27). Due to increase blood circulation it also gives feeling of well being and relaxation and lightness in the body. It increases happiness in mind and calm the mind (28). Ayurveda based upon three

*doshas*. They threes are *vata*, *piita* and *kapha*. Imbalance of these *doshas* can cause disorders. So, here one of the shatkarmas practice,hrid dhauti balances these three *doshas* and also prevent disorders caused by imbalances of them.

#### Conclusion

Through *shatkarmas* harmonization of *ida* and *pingla* two main flow of *prana* is achieved which results in physical and mental purity and balance. According to Ayurveda and hatha yoga, imbalance in *vata, pitta* and *kapha* creates disorders in body. Therefore, the *shatkarmas* also irradiate the disorders generated from *vata, pitta* and *kapha* imbalance in the body. The *shatkarmas* also helps to make balance between *vata, pitta* and *kapha* (29). Thus, it gives lightness to the body. Maharshi Gherand, describe in his text book *Gherand Samhita*:

षट्कर्मणा शोधनञ्च आसनेन भवेद्रूढम् । मुद्रया स्थिरता चैव प्रत्याहारेण धीरता ॥ 10 ॥ प्राणायामाल्लाघवञ्चध्यानात् प्रत्यक्षमात्मनि । समाधिना च निर्लिप्तं मुक्तिरेवं न संशय: ॥ 11 ॥ - Gheranda Samhita 1/10-11 (30)

The *shatkarmas* also utilized before the *asana*, *pranayama* and other higher practices of yoga so that body becomes free from diseases and does not create any obstacles on the spiritual path (31). With this respect *hrid dhauti* is most powerful and efficient cleaning technique. It effects on both respiratory and digestive system and helps to overcome respiratory and digestive disorders which prevents from heart diseases and helps in balancing *vata*, *pitta* and *kapha*. Hence, before starting higher practices, these cleaning techniques especially *Hrid Dhauti* should be performed.

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