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ROLE OF AYURVEDA IN MANAGEMENT OF POST-CHOLECYSTECTOMY GASTRIC REFLUX AND DYSPEPSIA WITH SPECIAL REFERENCE TO AMLAPITTA – A REVIEW

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ABSTRACT

Post-cholecystectomy syndrome comprises of reoccurrence of symptoms similar to those of before cholecystectomy. It is usually symptoms like upper abdominal pain, vomiting, dyspepsia, gastric reflux, with or without jaundice. The incidence rate has been reported as high as 40%. The management of disease is somewhat difficult, the patient needs to follow the restrictions and medications for lifelong. Hence they are continuously looking towards Ayurveda for solution of these problems. The symptom of gastric reflux and dyspepsia is similar to disease *Amlapitta* of Ayurveda. The cardinal symptoms of *amlapitta* are *avipaka*(indigestion), *hritkantha daha*(heart and throat burn) and *tikta-amlodgara*. The treatment of these symptoms with modern medicine can cause severe side effects hence, in this article an attempt is made to review *ayurvedic* classical text and related literature to understand the disease post cholecystectomy; symptoms of gastric reflux and dyspepsia with emphasis on *ayurvedic* treatment in relation to *amlapitta*.

Keywords: Post-cholecystectomy, *amlapitta*, gastric reflux, dyspepsia, PCS

Introduction:

Post-cholecystectomy syndrome is defined as the reoccurrence of the symptoms similar to those experienced before cholecystectomy. This usually takes in the form of upper abdominal pain and dyspepsia, with or without jaundice.⁽¹⁾ It was originally defined by Pribram as a pure functional disturbance after cholecystectomy.⁽²⁾ It is well known fact that the gallbladder acts as a volume reservoir, collecting the bile produced by the liver and releasing it when required i.e after a meal. The loss of gallbladder causes impairment in cyclic pattern of bile juice excretion; the loss of neurohormonal responds also causes motility changes in upper gastrointestinal system and lead to duodenogastric reflux; thus regurgitation of duodenal content into the stomach induces the gastric mucosal injury resulting in persistent symptoms such as epigastric pain, nausea and vomiting.⁽³⁾ The incidence of post cholecystectomy syndrome has been reported to be as high as 40% and the onset of symptoms may range from 2 days to 25 years.^(1,4) There has been gender-specific risk factor for developing symptoms; in one study the incidence of recurrent symptoms among female is 43% compared to 28% of male patients.⁽⁵⁾ Patients with symptoms like gastric reflux, abdominal pain, vomiting, reduced appetite nausea and heart burn can be seen in the disease *Amlapitta* mentioned in *Ayurveda*. *Amlapitta* has been mentioned in various *Ayurvedic* texts such as *Kashyapa Samhita*, *Yogaratanakara*, and *Bhaishajya Ratnavali*. *Amlapitta* is a *Pitta Pradhana Vyadhi* and possess symptoms such as *Amlodgara*, *Hrikantha daha*, *Avipaka*, *Aruchi*, *Utklesha*, *Hritshula* and *Vidbheda*(diarrhea).^(6,7) It is suggested that it is very common issue suffered by the patients in more or less severity. However the antacids are among the one most widely used medicine all

over the world. By taking antacids for long may cause dose-dependent rebound hyperacidity and milk-alkali syndrome. Antacids that contain aluminum hydroxide may cause constipation, aluminum-intoxication, osteomalacia and hypophosphatemia.⁽⁸⁾ From *Ayurvedic* point of view, *Amlapitta* can be treated with various formulations mentioned in *Samhitas* without any harmful effects of the drugs.

Aim and Objective:

To study *Ayurvedic* management of Postcholecystectomy gastric reflux and dyspepsia with reference to *Amlapitta*.

Material and Method:

Amlapitta is one of the *pitta pradhan vyadhi* mentioned in *ayurved samhitas*. This *samhitas* were used to take information on *chikitsa* aspects of *Amlapitta vyadhi*. In this article we have made an attempt to study treatment of gastric reflux and dyspepsia in post cholecystectomy syndrome with *ayurvedic* drugs.

Disease Review:

Amlapitta is considered as a good symptom in number of places by *Acharya Charaka*. *Acharya Charaka* says in *Samprapti* of *Amlapitta* described as *Aamvisha* when get mixed with *pitta*, the disease *Amlapitta* develops. *Amlapitta* is composed of word *Amla* and *Pitta*.⁽⁹⁾

Acharya Kashyapa was the first one to give detailed description on the disease and to analyse its *Doshik* basis. The details of the disease including classification according to *gati* i.e *Urdhvaga* and *Adhoga* *Amlapitta* was given by *Madhavakara*.

Nidhana of Amlapitta:

Aharja Hetu: Viruddha ahar, sandusta bhojna, vidhahi bhojna, vidhgdh bhojna.⁽¹⁰⁾

Viharja Hetu: Divaswapana, Atisanana, Avagahana.⁽¹¹⁾

Manashika Hetu: Kama, Krudha, Lobha, Moha, Irshaya, Shoka, Bhaya.⁽¹²⁾

Purvarupa of Amlapitta: Trishana, Alasya, loss of bala, Annavidaha, Gauravata.⁽¹³⁾

Rupas of Amlapitta: Avipakka, Utklesha, Tikta-amlo udgara, Hritkantha daha, Aruchi.⁽¹⁴⁾

Samprapti of Amlapitta:

According to Acharya Kashyapa, the indulgence of *nidana* causes *dosha prakopa* especially *pitta prakopa*. This *Pitta prakopa* creates *mandha agni* in *amashaya* due to which the food ingested does not digest properly; it becomes *vidhagada* and *shuktibhava*. This *vidhagada* and *shuktibhava* of food creates *amlata* in *amashaya*. This condition is called as *Amlaitta*.⁽¹⁵⁾

Prakar of Amlapitta: Adhoga Amlapitta (downward), Urdhwaga Amlapitta (upward).⁽¹⁶⁾

Also by *dosha* dominance— *Vataj*, *Pittaj* and *Kaphaj*.⁽⁷⁾

Treatment of gastric Reflux and Dyspepsia (Amlapitta):

1. Avoid causative factors
2. Palliative treatment as the disease is of *Pitta* origin, all measures are undertaken to pacify

pitta.

3. *Panchakarma* treatment when patient cannot be well managed with oral medications

'*Panchakarma* procedures' like *Vamana* (emesis) or *virechana* (purgation) whichever is

needed should be administered. In chronic cases *Asthapanavasti* (medicated enema) is

indicated.

Drugs used for Dosha pachana:

Acharya Kashyapa mentioned three drug combinations which are-

- *Nagara* (*Zingiber officinale* Roscoe)+ *Ativisha* (*Aconitum heterophyllum* wall)+ *Musta* (*Cyperus rotundus*)

- *Nagara* (*Zingiber officinale*)+ *Ativisha* (*Aconitum heterophyllum* wall)+ *Abhaya* (*Terminalia chebula*)

- *Trayamana* (*Gentiana kurroo*) + *Patolasya Patra* (*Trichosanthus dioica*) + *Katukarohini* (*Pichrohiza kurroa*)

- In dose of three *Karsha* (36gm) should be given for drinking either alone or decoction of *Kiratatikta* (*Swertia chirata*) or *Rohini* (*Pichrohiza kurroa*) till the *Amashaya* (stomach) becomes *Vishudha* (clear). By this the *Agni* gets into the normal stage and the person starts attaining *Utsaaha*, *Tushti*, *Pushti* and *Bala*.

When the *Doshas* becomes *Pakva* and move towards the *Pakvashaya* (large intestine) it should be eliminated through Mild purgation.⁽¹⁷⁾

Drugs used for Vamana and Virechana:

Emesis should be induced with salt water or lukewarm milk or with sugar cane juice or with honey water or with bitter drugs.⁽¹⁷⁾

- A combination of *Triphala* (*Terminalia chebula*, *Terminalia bellirica*, *Emblica officinalis*), *Trayamana* (*Gentiana kurroo*), *Katurohini* (*Pichrohiza kurroa*), *Trivrit* (*Operculina turpethum*) all these in ½ *Pala* (24gm) and *Trivrit* (*Operculina turpethum* (L.) half to the total quantity of above four should be taken for attaining *Virechana*.

- Leaves of *Patola* (*trichosanthus dioica*) and pulp of *Triphala* (*Terminalia chebula*, *Terminalia bellirica*, *Emblica officinalis*) 24gms + *Trayanti* (*Gentiana kurroo*), *Rohini* (*Pichrohiza kurroa*) *Nimba* (*Azadirachta indica*) and *Yashtika* (*Glycyrrhiza glabra*) –

1 Karsha (34gms) +2Pala (96gm) of Masura(Lens culinaris) all should be cooked with one Adhaka (768ml) of water till 1/8th remains. After straining, it should be recooked along with one Kudava (192gm) of Ghirta till ½ Prastha (384gm) remains.

· By drinking this either hot or cold one gets immediate purgation comfortably. This cures even very chronic *Amlapitta* and also destroys immediately the disorders of *Vata*, *Pitta Jwara* (Pyrexia), *Kushta* (Skin disorders), *Visarpa* (Erysipelas), *Vatashonita*(Gout), *Rakta gulma* (Fibroid tumor), *Vispota*.⁽¹⁸⁾

Some important single drugs useful in *Amlapitta*:

Shatavari, 3gm twice a day with milk
Yashtimadhu 3gm twice a day with milk
Amalaki (Indian gooseberry) 3gm twice a day with water
Sunthi (dry ginger) 1- 3gm twice a day with water

Some important Pharmacopeial Preparations:

Kamdudha Rasa 250-500mg twice a day with Honey
Sutashekhar Rasa 250mg with Honey twice a day
Prawal Pishti 125 to 250mg with *Amalki* Juice
Prawal Panchamrit Rasa 250-500mg twice a day
SwarnaMashik Bhasma 125-250mg twice a day
Dashang Kwath 14-28ml twice a day with 1tsf of Honey
Bhoonimbadi kwatha 15-20ml twice a day
Patoladi kwatha 15-20ml twice a day
Gulucyadi kashaya 15-20ml twice a day
Aragwadhamrtadi kashaya 15-20ml twice a day
Amalakyadi Churna 3gm twice a day with water
Avipattikar Churna 1-2gm twice a day milk

Shatavarighrit 6-12gm twice a day
Yashtighrit 6-12gm twice a day
Sukumaaraghritam 6-12gm twice a day
Dadimadighirta 6-12gm twice a day

Do's (*Pathya*):

- Follow the meal times.
- Light food, Coconut water, articles having cooling properties.
- Vegetables like white pumpkin, bitter gourd, matured ash gourd, leafy vegetables except Methi, Wheat, old rice, barley, green gram, sugar candy, cucumber, Fruits like gooseberry, dry grapes, black grapes, sweet lime, pomegranate, fig, dry fig, Take adequate amount of fluids like pomogranate juice, lemon juice, amla juice, sweetlime juice, Medicated water with ushir (wala) or coriander seeds, or laja (puffed rice).
- Warm water.
- Dadimpak(sweet preparation made of pomegranate), Moramla(jam made from amla), gulkand(jam made from rose petals) with milk.
- A cup of lukewarm milk after every two or three hours.
- One teaspoonful of ghee with warm milk.
- Take adequate sleep & rest
- Practice Yoga, *Pranayam*, meditation & exercise regularly.^(19,20)

Don'ts (*Apathya*):

- Avoid excessive spicy, sour and salty substances.
- Avoid fried and junk food items.
- Do not remain hungry.
- Avoid fast.
- Do not over eat, take small frequent meals.
- Avoid untimely and irregular food habit.

- Avoid foods containing excess amount of garlic, salt, oil, chillies, etc. very often.
- Avoid rice curd and sour fruits.
- Avoid lying down immediately after food and in supine position. The best recommended position is left lateral.
- Avoid smoking, alcohol, tea, coffee and aspirin type drugs.
- Avoid stress.^(19,20)

Domestic Remedies:

- 1) The Infusion of coriander seeds (*Dhanyak*) taken with sugar twice a day.
- 2) Water obtained from green fruit of Coconut 100-500 ml to be taken twice a day.
- 3) Powder of *Amla* 3-6gm BD with water.
- 4) Powder of *Shatapushpa* (*Saunf-Anethumsowa*) with sugar mixed in a glass of water - 20 ml twice daily for 1 week or till the symptom subsides.
- 5) Chewing of half a teaspoon of fennel seeds after food.

Discussion:

Laparoscopic cholecystectomy has rapidly gained popularity and is now considered the treatment of choice for symptomatic gallbladder disease. The advantages over laparotomy including reduced hospitalization, pain, morbidity, better cosmesis and financial savings. Overall, cholecystectomy is an established successful operation which provides total relief of pre-operative symptoms in more than 90% of patient. Post-cholecystectomy syndrome is defined as the recurrence of symptoms similar to those experienced before the cholecystectomy. These patients may present with abdominal pain, jaundice or dyspeptic symptoms. Many of these complaints can be attributed to complications including bile duct injury, biliary leak, biliary fistula and retained bile duct stones. Cholecystectomy is associated with several physiological

changes in the upper gastrointestinal tract which may account for the persistence of symptoms or the development of new symptoms after gallbladder removal. The cholecystosphincter of Oddi reflex, cholecysto-antral reflex, and cholecysto-oesophageal reflexes are all disrupted and a number of local upper gastrointestinal hormonal changes also occur after cholecystectomy.⁽²¹⁾ The disease *Amlapitta* is a common functional disease of *Annavaha srotas*. *Pitta* is a bodily chemical substance which is mainly responsible for the maintenance of the process of digestion, transformation and transmutation. The above postcholecystectomy symptoms like gastric reflux and dyspepsia are similar of *Amlapitta*. *Amlapitta* is a pathophysiological condition in which the *Pitta* gets vitiated in terms of *Vruddhi* (excessiveness) and sourness of *Pitta* is increased⁽²⁰⁾. So a person should avoid all the factors responsible for aggravation of *pitta*. Milk is excellent in the condition specially preceded by *langana*. Along with is *Ayurveda* suggests to drink warm water freely because according to it "hot destroys hot" (*ushnam ushna hanti*).⁽¹⁹⁾

According to *Ayurveda* majority of the drugs have *Tikta-Madhura Rasa*, *Laghu-Ruksha Guna*, *Shita Virya*, *Madhura Vipaka* and *Pitta-Kaphaghna* properties which alleviates the *Pitta dosha*, the aggravating factor of *Amlapitta*. The drugs also have *Dipana-Pachana* property which acts directly on *Agni*, thus increasing *Jatharagni* and *Dhatvagni*. Thus stopping the process of vitiation of *Rasa* and *Raktadhatu* which are the main *dushyas* of *Amlapitta*. Some of the drugs also possess *Rochana*, *Anulomana*, *Rakta-shodhana* and *Krimighna* properties which are essential to treat *Rasa-Raktadusti*. *Mandagni* is the motive cause for the disease *Amlapitta*. As a result, *Ama* is produced. *Dipana-Pachana* property of

the drugs corrects the *Mandagni* and breaks the pathogenesis of *Amlapitta*. It also has *Amapachana* property. Hence it promotes *Dhatvagni* and as a result *Dhatupusti* process is motivated. Most of the drugs possess *Laghu-RukshaGuna* and *Tikta-Madhura-KashayaRasa* which purifies the *Srotasa* through their *srotoshuddhikara* property.^(22,23) Thus with all the mentioned effect of *ayurvedic* drugs and formulations one can treat symptoms of post cholecystectomy gastric reflux and dyspepsia without any harmful effects of medications and dependency for life.

Conclusion:

The fast and modern lifestyle, irregular food habits and disturbance in natural cycle of human body i.e sleeping pattern causes the high incidence rate of post cholecystectomy symptom- gastric reflux and dyspepsia. These can be corrected with proper diet-lifestyle (*Pathya* and *Apathyas* of *Amlapitta*). Food should be consumed according to persons own digesting capacity. *Ayurvedic* drugs on *Amlapitta* can help reduce symptoms, help in smoothing mucosal layer of stomach and control the secretion of *Pitta* dealing with *amlapitta* symptoms like gastric reflux and dyspepsia.

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