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Case Study

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A CASE STUDY ON SUCCESSFUL AYURVEDIC MANAGEMENT OF HELICOBACTER PYLORI

Dr. Tushar G. Jani* B.A.M.S. and Dr. Praveen S. Sajjan B.A.M.S., M.D. (Ayu)

¹2nd Year P. G. Scholar, Department of P. G. Studies in Kayachikitsa, Shri Vijaya Mahantesh Ayurvedic Medical College & P. G. Research Centre, Ilkal, Karnataka, India.

²Assistant Professor, Department of P. G. Studies in Kayachikitsa, Shri Vijaya Mahantesh Ayurvedic Medical College & P. G. Research Centre, Ilkal, Karnataka, India.

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*Corresponding Author Dr. Tushar G. Jani

2nd Year P. G. Scholar,

Department of P. G. Studies

in Kayachikitsa, Shri Vijaya

Mahantesh Ayurvedic

Medical College & P. G.

Research Centre, Ilkal,

Karnataka, India.

ABSTRACT

A case presented of chronic gastritis associated with *Helicobacter Pylori* (*H. Pylori*) infection, which showed a resemblance with the clinical features of *Amlapitta and Krimi Roga* described in *Ayurveda*. The antibiotic therapy is encouraged as the first line of treatment. But it did not give satisfactory results due to the development of resistance to antibiotics with undesirable side effects. Later it was treated successfully with *Shodhana* procedures like *Virechana Karma* and *Shaman Aushadhi*. The symptoms are evaluated before and after treatment which showed marked improvement in the condition of patient.

KEYWORDS: Helicobacter Pylori (H. Pylori), Amlapitta, Krimi, Ayurveda, Virechana, Shodhana, Shamana.

INTRODUCTION

Helicobacter Pylori (H. Pylori)

Gastritis is strongly associated with *H. Pylori* infection. This infection is more common in the developing world, affecting up to 90% of adults. These infections are probably acquired in childhood through person-to-person contact. This being the most common cause of chronic gastritis attacks the lining that protects the stomach. *H. Pylori* is a gram-negative and spiral bacterium with multiple flagella at one end, making it motile, allowing it to burrow and live be neath the mucus layer adherent to the epithelial surface. Here the pH of the surface is close to neutral and any acidity is buffered by the organism's production of the enzyme urease.

This increases the pH by producing ammonia from urea around the bacterium and between its two cell membrane layers. It aggravates a local inflammatory response which causes chronic gastritis in the underlying epithelium in most individuals.^[1]

Chronic gastritis due to *Helicobacter Pylori* infection

In most people, H. Pylori cause localized antral gastritis associated with depletion of somatostatin and increased gastrin release. The subsequent hypergastrinemia stimulates increased acid production by parietal cells. Worldwide, more than 80% of duodenal ulcers and more than 60% of gastric ulcers are related to H. Pylori colonization. [2]

Amlapitta and H. Pylori

H. Pylori infection may not cause any symptoms for long but if symptoms do appear there will be nausea, heartburn or severe pain in the abdomen. The clinical feature of Amlapitta is similar to H. Pylori. [3] The Pitta imbalance causes the symptoms of heartburn, gastroesophageal reflux, nausea and occasionally vomiting. Ayurveda system provides the natural cure for these disorders. Similarly, Ayurveda also offers treatment for H. Pylori infection as well. According to Ayurveda, there are three Doshas that are responsible for keeping good health. These three doshas are *Vata*, *Pitta* and *Kapha Dosha*. [4] H. Pylori infection is triggered by the aggravation of the *Pitta Dosha* of the body. This health problem starts with the problem of hyper acidity, known as *Amlapitta* in *Ayurveda*.^[5]

Krimi and H. Pylori

Krimi is accepted as an etiological factor of various diseases since the Vedic period onwards. The probable correlation of *Krimi* with contemporary infectious microbes may be possible by examining the resemblance of their habitat, morphology and effect on the host. Under the word *Krimi*, all microorganisms like bacteria, viruses, parasites, fungi, etc. can be considered. The word 'Krimi' can be widely used for all worms and microorganisms in Ayurveda. Acharya Charaka has given details of Krimi elaboratively. There is a description of 20 types of Krimi under four subdivisions Malaja, Raktaja, Shleshmaja and Purishaja krimi. [6] in which the location of *Shleshmaja* and *Purishaja Krimi* are gastro-intestinal tract.

The Sleshmaja Krimi, which is located in the stomach is correlated here to H. Pylori which resides in the gastric mucous. Also, the Kledaka Kapha can be compared to the gastric mucous. The Sleshmaja Krimi lives in Amashaya^[7] and H. Pylori is seen in the gastric mucosa or between the mucous layer and the gastric epithelium.

CASE REPORT

A 37-year-old married male patient visited OPD of R. P. K. Ayurvedic hospital with presenting complaints of heartburn and epigastric pain with vomiting on and off. He also had occasional yellowish secretion from his mouth.

History of presenting complaint

The patient was apparently healthy 3 years back, but gradually he developed symptoms like heartburn and acidic regurgitation, which were present occasionally with vomiting. He underwent an endoscopic examination which revealed biliary gastritis with esophagitis and his stomach body was full of bile. The biopsy was positive for *H. Pylori* infection. He took modern medicine treatment for 2 months and had very little relief. So, he came to the OPD of the *Kayachikitsa* department of R. P. K. Ayurvedic hospital, Ilkal.

Past history

The patient was having a H/O Gall bladder stone a few years back. There was no history of hypertension or diabetes mellitus.

Personal history

The patient had reduced appetite and was on a mixed diet with a habit of taking spicy items regularly. He had disturbed sleep. The frequency of micturition was regular. The bowel was irregular with unsatisfactory stools.

General examination

The patient was averagely built with normal vitals. Pulse rate was 78/minute, respiratory rate was 16/minute, blood pressure was 130/80 mmHg and body weight was 72 kg.

Astavidha Pariksha

| SN | Pariksha | Findings |
|----|----------|---|
| 1 | Naadi | Pitta – Kapha |
| 2 | Mutra | 4 to 5 times/day and 1 time/night |
| 3 | Mala | 2 times a day and feels unsatisfied. |
| 4 | Jihva | Alpaliptata (mildly coated) |
| 5 | Shabda | Prakruta (Normal) |
| 6 | Sparsha | Anushnasheeta (Normal body temperature) |
| 7 | Drik | Prakruta (Normal) |
| 8 | Akruti | Madhyama (Moderate) |

Investigation

| SN | Investigation | Impression |
|----|---|--|
| | | OG Junction - Linear ulceration in the |
| 1 | Upper GI endoscopy | lower oesophagus, Esophagitis |
| | | Body - Full of Bile, Gastritis |
| 2 | A biopsy was taken for <i>H. Pylori</i> | +ve for <i>H. Pylori</i> |

Systemic examination

Per abdominal examination - Tenderness on palpation at the left iliac fossa. The symptoms were abdominal pain and sour belching. Pain aggravates by the intake of Katu, Lavana, Amla (Hot, spicy, sour, salty items) and cold items were *Upashaya* (favourable). Based on clinical presentation condition was diagnosed as Amlapitta with Krimi roga.

CHIKITSA (TREATMENT)

The Ayurvedic approach to treating H. Pylori involves treating the imbalance of Pitta dosha and removal of Ama with the help of Shamana Chikitsa and Shodhana procedures like Virechana and Shamana Chikitsa along with the use of Tikta Rasa Aushadhi. [8] Treatment was done on the basis of Krimi Chikitsa and Amlapitta Chikitsa.

Shodhana Chikitsa

Virechana

Procedure

- Deepana and Pachana was done with Ajamodadi Churna given orally, 3 grams twice a day with Ushna Jala (warm water) for 3 days.
- Snehapana is done with Panchatikta Ghrita for 4 days
- Vishrama Kala for 2 days Abhayanga and Swedana is done in this period
- Virechana was given with Trivrutta Avaleha 60 grams with Dugdha for one day.

Shamana Aushadhi

- Bhunimbadi Kashaya 4tsf BD before food for 15 days.
- Pravala Panchamrita Rasa 2 tablets BD before food for 15 days.
- Sutashekhara Rasa 2 tablets BD after food 15 days.

OBSERVATION AND RESULT

| COMPLAINTS | BEFORE TREATMENT | AFTER TREATMENT |
|-----------------------------------|------------------|-------------------|
| Abdominal pain | Present | Absent |
| Heartburn | Severe | Mild |
| Acid regurgitation | Everyday | Frequency reduced |
| Nausea and vomiting | Present | Absent |
| A feeling of unsatisfactory stool | Present | Absent |

DISCUSSION

The treatment was planned in two parts, Shodhana Chikitsa and Shamana Chikitsa.

Use of Ajamodadi Churna

Before going for *Virechana* patient underwent *Deepana* and *Pachana*, for this purpose *Ajamodadi Churna* is used as it is having the properties like *Vata Kapha Shamaka*, *Vatanulomana*, *Deepana*, *Shroto Shodhana*, *Rasa* like *Tikta*, *Katu*, *Kashaya*, *Lavana*, *Amla Rasa* and *Ushna Virya*. *Ajmodadi Churna* has the ability to balance the *Kapha* and *Vata Dosha* and their related diseases. It helps to improve the discomfort. It has anti-helminthic and anti-spasmodic qualities. It helps to eliminate toxins from the body and clear networks. *Ajamoda* as the main ingredient acts as *Vatanulomana* and does *Pachana Karma* hence improving peristaltic movements reducing regurgitation and functions as a carminative, thus beneficial in treating Hyperacidity. [9]

Implication of *Krimi Chikitsa*

Acharya Charaka has described a line of treatments of Krimiroga which are Apakarshana, Prakriti Vighata and Nidana Parivarjana. [10]

Prakriti Vighata as Krimi Chikitsa

Prakriti Vighata which is the destruction of the susceptible environment of the Krimi can be achieved by the use of drugs which are, Tikta, Kashaya Katu and Ushna.^[11] Here Panchatikta ghrita is used which acts as Prakriti Vighata. Also, Ajamodadi churna which contains Ajamoda and Vidanga works as Prakriti vighata.

Panchatikta ghrita as Snehapana and Prakriti Vighata

Panchatikta Ghrita eliminates toxins from the body and is helpful in curing skin conditions and injuries. It is also effective in the treatment of diseases that occur due to the vitiation of Vata. Pitta and Kapha. This medicine is prepared from bitters drugs, Ghee and Triphala. The bitter drugs are Neem, Patola, Vasa and Guduchi etc, which removes toxins from the body

and also works as Prakriti Vighata. [12] Patola leaves are tonic and laxative that expels intestinal parasites improves digestion and is good for the digestive system.

Virechana Karma as Pradhana Karma

Virechana is one of the important Shodhana procedures because it not only acts over Pitta but also on Kapha, and Vata. It Removes the Avarana of Vayu in Kostha and corrects Agni Vaigunyata. [13] Virechana drugs increase bile secretion and induce peristaltic movements. The sphincter is relaxed during the relaxation phase of peristalsis and bile comes to the G.I. tract. This bile can be linked to Pitta, which will be eliminated during Virechana along with bile which is already present in stomach body and other toxins. Henceforth Virechana decreases Pitta Dushti and regulates Agni.

Apakarshana by Virechana Karma

In the case of internal Krimi, Apakarshana can be done by Sodhana. Here, Apkarshana is done with Virechana karma. [14] Accordingly, Virechana karma is the most effective treatment for it. With the help of Virechana karma, vitiated Doshas and Mala with various things like worms and other organisms get expelled out of the gut. Moreover, Virechana does Sroto Shuddhi which improves absorption of the taken food and nutrients which helps the patient to get healthy. Nowadays there is increased drug resistance to helminthic and antibiotic drugs, and in this Virechana provides better results.

Bhunimbadi Kashaya

Along with the Virechana, Shamana Chikitsa was done with Bhunimbadi Kashaya and other drugs. The imbalance of this Pitta causes many heat-related problems. Bhunimbadi Kashaya by virtue of its ingredients like Bilva, Dhanyaka etc helps to keep the balance of Pitta dosha and thus reduce heat in the body. [15] Bhunimbadi Kashaya is useful in burning sensation in the abdomen in conditions like Hyperacidity, gastritis etc.

Pravala Panchamrut Rasa in Amlapitta

Amlapitta is the condition in which Pitta is increased in the body by Amla Guna. Pravala Panchamrut Rasa is Sheeta and does Pitta Shaman. It is indicated for Amlapitta, Chardi, Raktapitta, Mootravikara, Jwara etc. [16] It contains calcium carbonate which rapidly neutralizes oesophageal acid and may prevent acid reflux, suggesting another mechanism of action independent of acid neutralization.

Sutashekhara Rasa in Amlapitta

Shamanoushadi including drugs having Madhura Vipaka and does Deepana and Pachana should be advised so that it does not irritate the gastric mucosa, like Sutashekara Rasa. The ingredients of this medicine act as Pittashamaka due to its Sheeta Virya and also it is having Vranaropana properties, so it acts as an anti-inflammatory and helps in healing. [17] Sutashekhar Rasa reduces the increased sourness and sharpness or penetrating power of Pitta. These things are accountable for increasing acid production in the stomach and increasing the sensitivity of the gastric mucosa. The increased sensitivity leads to hyperacidity and inflammation of the lining of the stomach, which is called gastritis. As Sutashekhar Rasa acts on these things and restores the Pitta balance. It soothes the gastric mucosa and linings of the oesophagus which helps to reduce their irritation. Therefore, it is highly useful in hyperacidity, gastritis and acid reflux.

Pathya-Apathyas (Regimen)

The Pathya to be followed are Rakta Sali, Patola, karvellaka, Rasona, Brihati Phala, Vidanga and Katu, Tikta, Kashaya rasa Bhojana, etc. The Apathays include Vega-Dharana, Virudha-Pana-Ashana, Divaswapna, Pishtanna, Dadhi, and Amla rasa etc. [18]

CONCLUSION

In this case study, the patient was suffering from *Amlapitta* for a few years and he tried all systems of medicine but did not get satisfactory results. In such patient *Virechana* along with *Shaman Aushadhis* has provided marked improvement in the symptoms of *Amlapitta as well as Krimi*. Now he has a good quality of life. Additionally, these treatments are cost effective, easy to use and safe. Also, further studies are expected with larger sample size in future.

REFERENCE

- I.D. Penman, C.W. Lees, Alimentary tract and pancreatic disease, DAVIDSON'S PRINCIPAL AND PRACTICE OF MEDICINE, Brian R. Walker, Nicki R. Colledge, Stuart H. Ralston, Ian D. Penman (Eds), Churchill Livingstone Elsevier, 22nd Edition, 2014; Page No 872.
- Martin J. Blaser, John C. Atherton, Helicobacter pylori infections, HARRISON'S PRINCIPLES OF INTERNAL MEDICINE, Dan L. Longo, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, J. Larry Jameson, Joseph Loscalzo, The McGraw-Hill Companies, 18th Edition, 2012; Volume 2, Page No 1262.

- 3. Madhavakara, MADHAV NIDANAM, Prof. K. R. Srikanta Murthy, Chaukhmbha Orientalia, Varanasi, 8th Edition, 2007; Page No 166.
- 4. Vagbhata, ASTANG HRDAYAM, Vidyotini Hindi Commentary, Kaviraj Arideva Gupta, Vaidya Yadunandana Upadhyaya, Edition Reprint, 2012, Chaukhambha Sanskrit Sansthan, Varanasi, 11th Edition, 1993; Page No 4.
- 5. Madhavkara, MADHAV NIDANAM, Prof. K. R. Srikanta Murthy, Chaukhmbha Orientalia, Varanasi, 8th Edition, 2007; Page No 166.
- Agnivesha, CHARAKA SAMHITA, Ayurveda Dipika Ayusi Hindi Commentary, Vd. Harish Chandra Singh Kushwaha, Chaukhambha Orientalia, Varanasi, Reprint Edition, 2016; Volume 1, Page No 647.
- Agnivesha, CHARAKA SAMHITA, Ayurveda Dipika Ayusi Hindi Commentary, Vd. Harish Chandra Singh Kushwaha, Chaukhambha Orientalia, Varanasi, Reprint Edition, 2016; Volume 1, Page No 648.
- 8. Vaidya Shri Laxmipati Shashtri, YOGRATNAKAR, Vidyotini Hindi Commentary, Bhisprana Shribrahmashankar Shashtri, Chaukhambha Prakashana, Varanasi, Reprint Edition, 2013; Uttarardha, Page No 239.
- 9. Sharangdharacharya, SHARANGDHARA SAMHITA, Dr. G. Prabhakar Rao, Chaukhambha Publications, New Delhi, 1st Edition, 2013, Madhyam Khanda, Page 132.
- 10. Agnivesha, CHARAKA SAMHITA, Ayurveda Dipika Ayusi Hindi Commentary, Vd. Harish Chandra Singh Kushwaha, Chaukhambha Orientalia, Varanasi, Reprint Edition, 2016; Volume 1, Page No 649.
- 11. Agnivesha, CHARAKA SAMHITA, Ayurveda Dipika Ayusi Hindi Commentary, Vd. Harish Chandra Singh Kushwaha, Chaukhambha Orientalia, Varanasi, Reprint Edition, 2016; Volume 1, Page No 649.
- 12. Shri Govind Das, BHAISAJYA RATNAVALI, Vidyotini Hindi Tika, Bhisagratna Shri Bhrahmashankar Mishra, Shri Kaviraj Ambikadatt Shashtri Ayurvedacharya, Shri Rajeshwardatta Shashtri(Eds), Chaukhambha Prakashana, Varanasi, 18th Edition Revised, 2019; Page No 937.
- 13. Agnivesha, CHARAKA SAMHITA, Ayurveda Dipika Ayusi Hindi Commentary, Vd. Harish Chandra Singh Kushwaha, Chaukhambha Orientalia, Varanasi, Reprint Edition, 2016; Volume 1, Page No 249.
- 14. Agnivesha, CHARAKA SAMHITA, Ayurveda Dipika Ayusi Hindi Commentary, Vd. Harish Chandra Singh Kushwaha, Chaukhambha Orientalia, Varanasi, Reprint Edition, 2016; Volume 1, Page No 649.

- 15. Shri Govind Das, BHAISAJYA RATNAVALI, Vidyotini Hindi Tika, Bhisagratna Shri Bhrahmashankar Mishra, Shri Kaviraj Ambikadatt Shashtri Ayurvedacharya, Shri Rajeshwardatta Shashtri(Eds), Chaukhambha Prakashana, Varanasi, 18th Edition Revised, 2019; Page No 81.
- 16. Shri Govind Das, BHAISAJYA RATNAVALI, Vidyotini Hindi Tika, Bhisagratna Shri Bhrahmashankar Mishra, Shri Kaviraj Ambikadatt Shashtri Ayurvedacharya, Shri Rajeshwardatta Shashtri(Eds), Chaukhambha Prakashana, Varanasi, 18th Edition Revised, 2019; Page No 681.
- 17. Vaidya Shri Laxmipati Shashtri, YOGRATNAKAR, Vidyotini Hindi Commentary, Bhisprana Shribrahmashankar Shashtri(Eds), Chaukhambha Prakashana, Varanasi, 5th Edition Reprint, 2013; Uttarardha, Page No 244.
- 18. Shri Govind Das, BHAISAJYA RATNAVALI, Vidyotini Hindi Tika, Bhisagratna Shri Bhrahmashankar Mishra, Shri Kaviraj Ambikadatt Shashtri Ayurvedacharya, Shri Rajeshwardatta Shashtri(Eds), Chaukhambha Prakashana, Varanasi, 18th Edition Revised, 2019; Page No 931.