An Integrated Traditional Therapy Approach Involving Yagya Therapy In Patient With Symptoms Similar to Crohn's Disease

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Abstract. Background: Crohn’s disease (an inflammatory bowel disease - IBD) is a chronic gastrointestinal inflammatory disorder. Common symptoms include rectal bleeding, persistent diarrhea, abdominal pain, extreme fatigue, weight loss, constipation, etc. Although it is a widespread disease, its etiology and mechanism are still not properly understood. Hence, even though several treatment methodologies have been employed for the management of the symptoms associated with the Crohn's disease - side-effect free, long-term management of this disease is still not achieved. Purpose: As per the classical texts of Ayurveda, Pachak Pitta, Saman Vayu and Kledak Kapha are responsible for proper digestion; vikriti (vitiation) of these Doshas can lead to various types of diseases of the gastrointestinal tract. Hence, herbal medicines that balance these Doshas, as well as provide nourishment to the body tissues, can be recommended for the management of the observed symptoms of the disease in the present study. Yagya Therapy provides pulmonary inhalation of medicinal smoke of multiple herbs (generated through oblation in fire along with chanting of Vedic hymns), which provide therapeutic benefits. The Vedic hymns also contribute to the positive restructuring of the psyche of the patient. Methodology: A case report about a male patient, who was suffering from symptoms similar to those found in Crohn's disease, has been presented in this article. The patient was prescribed an integrated approach pivoting on Yagya Therapy (using an appropriate herbal formulation - hawan-samagri), and some other Ayurvedic treatments like decoction of medicinal herbs, dietary restrictions, etc. Results: Before starting the integrated approach involving Yagya Therapy, the patient used to have severe pain in the abdomen, had swelling and stiffness in legs, had constipation, as well as weight loss; after taking the integrated approach involving Yagya Therapy, there was significant relief in the pain, the swelling in the legs was completely resolved, the stiffness in the legs had reduced, constipation was significantly reduced, as well as there was slight increase in weight. Earlier, because of weakness, the patient had difficulty in walking, changing posture from sitting to standing and vice versa, changing side while lying down; after taking the integrated approach, the patient feels an enhanced strength in his legs, has started walking on his own, can change posture from sitting to standing and vice versa on his own, can change side while lying down on his own. Overall, there was definite improvement in the condition of the patient. Conclusion: The integrated approach involving Yagya Therapy showed encouraging results with respect to the management of symptoms similar to those found in Crohn's disease.

Keywords - Crohn's Disease, Inflammatory Bowel Disease, Yagya Therapy, Ayurveda, Pulmonary Inhalation, Herbal Medicines
Introduction
Crohn’s disease (an inflammatory bowel disease - IBD) is a chronic gastrointestinal inflammatory disorder (1-9). Although it is a widespread disease, its etiology and mechanism are still not properly understood (2). Crohn’s disease usually affects the large intestine (colon) and the small intestine (ileum) (1). Common symptoms of Crohn’s disease include rectal bleeding, persistent diarrhea, abdominal pain, extreme fatigue, weight loss, constipation, etc. (1) Other complications include anemia, liver disease, etc. (1) Although several treatment methodologies have been employed for the management of the symptoms associated with the Crohn’s disease, side-effect free, long-term management of this disease is still not achieved (5). Hence, there is a definite need to look for safe and effective therapies for patients suffering from Crohn’s disease.

Various herbal medicines like Daikenchuto (a traditional Japanese herbal medicine) (4), Cannabis (3), Withania somnifera (Ashwagandha) (10), Pistacia lentiscus var. Chia (Anacardiaceae) (Chios mastic gum) (11-13), Curcuma longa (Turmeric) (14), etc. have been found to be useful in the management of symptoms associated with the Crohn’s disease.

Yagya is an ancient Indian therapeutic procedure (15-28), which is aimed at providing all round well-being of an individual. In the process of Yagya, coarse powder (hawan-samagri) made up of dry plant-medicines, as well as selected nutritious and aromatic substances, undergoes transformation into vapor phase, sublimation or decomposition by gradual heating; these phytomedicines spread along with the volatile substances and gases, released by the slow and controlled combustion process in Yagya fire (19). Medicinal phytochemicals, vapors of some essential oils and certain other volatile healthy constituents released in this process impart therapeutic advantage (16,19).

Yagyopathy, with disease-specific herbal preparation, has been shown to be an effective therapy for the treatment of various other physiological and psychological ailments. Raghuvanshi et al. (2009) (19) administered Yagyopathy to 15 patients of pulmonary tuberculosis in the age group of 15-60 years for 35 to 75 days using an anti-tubercular herbal preparation of Ayurvedic plant medicines. The effects were tested by sequential readings on different clinical physiological, microbiological, hematological, biochemical and pathological parameters, and the results showed encouraging healing possibilities of Yagyopathy for pulmonary tuberculosis (15-17,19,21). Batham et al. (2018) (25) showed that Yagya Therapy, as supportive care, can prevent the occurrence of epileptic seizures. Verma et al. (2018) (26) demonstrated the effectiveness of Yagyopathy in the treatment of Sub-clinical hypothyroidism (SCH). Mishra et al. (2018) (27) showed that Yagya Therapy, as supportive care, improved quality of life in cancer patients.

Looking at the multiple advantages of Yagyopathy, which include positive restructuring of the psyche of the participants by the chanting of Vedic hymns (Mantras) and meditating on their meaning, exposure to medicinal-fumes of multiple herbs, as well as their efficient pulmonary administration, Yagyopathy can be an effective treatment methodology for the management of symptoms similar to those of Crohn’s disease.

A case report about a male patient, who was suffering from the symptom's associated with Crohn's disease, is being presented here. His son visited the Out Patient Section of the Department of Ayurveda and Holistic Health at Dev Sanskriti Vishwavidyalaya, Haridwar for consultancy. In view of the above discussion about the management of symptoms similar to those of Crohn's disease, an integrated approach involving Yagya Therapy (using an appropriate herbal formulation - hawan-samagri), and some other Ayurvedic treatments like decoction of medicinal herbs, Ayurvedic medicines, dietary restrictions, etc. was prescribed to the patient, and the effectiveness of the same is being presented in this article.

Material and Methods
In the present study, an integrated approach involving Yagya Therapy (using an appropriate herbal formulation), and some other Ayurvedic treatments
like decoction of medicinal herbs, Ayurvedic medicines, dietary restrictions, lifestyle modifications, etc., was prescribed to a male patient suffering from symptoms similar to those of Crohn's disease.

Case Report
The son of a 50 year old male patient came to the Out Patient Section of the Department of Ayurveda and Holistic Health (DAHH) at Dev Sanskriti Vishwavidyalaya, Haridwar, in November 2018 for consultancy. He described the condition of the patient and provided his past medical reports, which indicated the symptoms similar to those of Crohn's disease; the medical history based on the details provided by patient's representative, and his past medical reports, is as follows:

In July 2016, the patient took medical advice elsewhere. He had symptoms of abdominal pain with per rectal (P/R) bleed, enlarged supraclavicular node, etc. CT scan of whole abdomen showed reduced lumen caliber associated with solitary necrotic right Ileal mesenteric node with mild Ileal mesentery edema - possibility of Inflammatory Bowel Disease (IBD) was expressed; Tubercular was suggested. Fine needle aspiration cytology (FNAC) was attempted from left supraclavicular region, and the features were suggestive of soft tissue lesion with myxoid change. CT Scan of chest and abdomen was done; the Impression included tiny subpleural nodule in right lung – likely post infective, and tiny hypodense lesion in liver segment VI/VII.

In August 2018, 3 months before the visit of patient's representative to DAHH, the patient again took medical advice elsewhere. As per the consulting doctor's discharge summary, the patient had complaints of chronic pain in the abdomen, epigastric burning, weight loss, and constipation, with medical history of Ileal aphthous ulcer and antral ulcer (as per the investigations in 2016). Endoscopy indicated antral hyperemia, few aphthous ulcers, hiatus hernia; colonoscopy indicated Ileal ulcers; stool was black in color. The possibility of Crohn's disease was mentioned, along with severe anemia (Hb - 5.3). The patient was advised allopathic medication.

In September 2018, the patient's Color Doppler test was done elsewhere for left lower limb. The doctor's opinion indicated thrombosis of left common femoral, superficial and deep femoral, popliteal and calf veins, along with subcutaneous edema in left lower limb

At the time of the visit to DAHH in November 2018, the patient suffered from the following problems: Pain in the abdomen, Swelling in the legs, Constipation, Loss in weight, Weakness - difficulty in walking, changing position from sitting to standing and vice versa, changing side while lying down, Epigastric burning.

Based on the above mentioned medical history and further discussion with the doctor, the current diagnosis for the patient included symptoms similar to those of Crohn's disease, indigestion, liver disorder.

Therapeutic Intervention
As mentioned above, the patient was suffering from symptoms similar to those of Crohn's disease. Hence, an integrated approach involving Yagya Therapy (using an appropriate herbal formulation), and some other Ayurvedic treatments like decoction of medicinal herbs, Ayurvedic medicines, dietary restrictions, lifestyle modifications, etc., was prescribed for the patient, with the understanding that the patient's representative had come to the Out Patient Section, and the patient would be taking these treatments at his home. The prescribed therapeutic interventions were as follows:

Yagya Therapy with Yakrit and Pleeha Vikar Nivarak (for resolving liver and spleen disorders) hawan-samagri (herbal mixture).

Patient was advised to follow the standard protocol of Yagya at home. The detailed protocol has been described in earlier publications (24, 28-32). Briefly, the procedure included:

- Doing Shatkarma for both internal and external purification (Pavitrikaran, Achaman, Shikhavandan, Nyasa - i.e. spiritual practices for purification), Prithvi Pujan (prayers to Mother Earth), Chandan-dharan (applying sandalwood
paste or roli-red powder on forehead), Guru-avahan (invoking the spiritual guide)

- Followed by - 24 oblations of the Yakrit and Pleeha Vikar Nivarak hawan-samagri (herbal mixture) in the fire (made from dried wood of Goolar tree (Ficus racemosa)), along with the chanting of Gayatri Mantra - specifically Surya Gayatri Mantra, i.e. Om Bhoor Bhuvah Swah, Bhaaskaraay Vidmahe, Diwaakaraay Dheemahi, Tannah Sooryah Prachodayaat (21,24,28), with the aim of providing strength and vigor

- Followed by - Pranayama, while sitting near the Yagya

Patient was advised to use hawan-samagri prescribed by Department of Ayurveda and Holistic Health (DAHH), Dev Sanskriti Vishwavidyalaya, Haridwar, and ghee (clarified butter made from indigenous cow’s milk).

As per Ayurvedic texts (33,34,35), one of the main reasons for most of the complaints of the patient was indigestion. For rectifying the digestion of the patient, and solution of these complaints, the liver has to work properly (33,34,35). Hence, Yakrit and Pleeha Vikar Nivarak (for resolving liver and spleen disorders) hawan-samagri was prescribed to the patient; this hawan-samagri has herbal medicines that promote proper functioning of the liver, and are beneficial in the problems related to the annavaha srotas (gastrointestinal tract).

Since past several years, DAHH has been prescribing Yagya Therapy (Yagyopathy), wherein different herbal preparations of Ayurvedic plant medicines (hawan-samagri) have been made in-house for various diseases. With regards to the present study, DAHH prescribed a Yakrit and Pleeha Vikar Nirvarak hawan-samagri, which consists of 12 herbs, and is based on the formulation for the same given in reference (24). No metal was used in the herbal preparation. All ingredients were well identified by taxonomist (36), were non-toxic, and could be useful in the treatment of the symptoms similar to those of Crohn's disease (1,24).

Along with the Yakrit and Pleeha Vikar Nirvarak hawan-samagri, patient was also prescribed a common purpose immunity-boosting hawan-samagri, based on the formulation for the same given in reference (21,24). Yakrit and Pleeha Vikar Nirvarak hawan-samagri and common purpose hawan-samagri had to be mixed in 3:1 ratio (i.e. 30 gm and 10 gm, respectively); 30 gm cow ghee had to be added to this herbal mixture; and then 24 oblations, along with chanting of Surya Gayatri Mantra, had to be made in the fire with this mixture. It was advised to do Yagya twice daily at the time of Sunrise and Sunset. The patient was advised to do Yagya Therapy for 3 months.

**Drinking decoction of Yakrit and Pleeha Vikar Nirvarak hawan-samagri (herbal mixture)**

Patient was advised to drink the decoction of the Yakrit and Pleeha Vikar Nirvarak hawan-samagri, wherein 20 gm of herbal mixture had to be mixed in 4.5 cups of water; kept overnight; boiled the next morning till 1.5 cup of water was remaining; this had to be divided in two equal parts, and taken empty stomach two times during the day, i.e. in morning and evening.

**Ayurvedic medicines**

- Jaundex syrup (polyherbal mixture with herbal medicines that improve liver function (36,37)) - one tablespoon had to be taken twice daily, i.e. in afternoon and evening
- Yakritadi Vati (a polyherbal Ayurvedic medicine with herbal medicines that are beneficial in liver and digestive disorders (36,38)) - one tablet had to be taken twice daily, i.e. in afternoon and evening
- Lavan Bhaskar Churna (a polyherbal Ayurvedic medicine with herbal medicines that are beneficial in digestive disorders (36,39))
- It was advised to take one tablespoon of Gau Arka (distilled cow urine) with water, once daily, in the morning (supports digestion (34))

**Dietary advice**

- It was advised to eat boiled food and drink boiled water
Eating 15 to 20 Sadabahar (Cantharanthus roseus) flowers
- It was advised to take Saindhav Lavan (supports digestion (34))

Other practices advised
- It was advised to do OM Chanting (for mental peace)

Results
In the present case study, the outcomes were assessed in a qualitative (subjective) manner based on the patient's experiential feedback, provided by his representative.

After the initial visit of patient's representative in November 2018, the patient continued with the prescribed integrated approach involving Yagya Therapy at his home. A followup was taken from the patient's representative over phone in March 2019. The feedback provided by the patient's representative is as follows:

- The patient had been doing Yagya daily, one time in the morning
- He had been drinking the prescribed decoction of havan-samagri twice a day - morning and evening
- He had been doing Pranayama for half an hour daily - during Yagya
- He had not been taking any other medication on a regular basis; only when there was excessive pain, he took recourse to OTC painkillers
- Before starting the integrated approach including the Yagya Therapy (prescribed in the present study), the patient used to have severe pain in the abdomen; however, in this followup, the patient's representative reported that ever since the patient started the integrated approach involving Yagya Therapy, there was significant relief in the pain
- Earlier, the patient had swelling in the legs; at the time of follow up there was no swelling
- Earlier, the patient had stiffness in the legs; at the time of follow up the stiffness in the legs had also reduced
- Earlier, the patient had severe constipation; at the time of follow up the constipation was significantly reduced
- The weight of the patient had also increased slightly
- Earlier, because of weakness, the patient had difficulty in walking, changing posture from sitting to standing and vice versa, changing side while lying down; ever since the integrated approach involving Yagya Therapy has been initiated, the patient feels an enhanced strength in his legs, has started walking on his own, can change posture from sitting to standing and vice versa on his own, can change side while lying down on his own
- However, only one problem was still persisting, i.e. epigastric burning, formation of gas and acid
- Overall, there was definite improvement in the condition of the patient

Discussion
The present study illustrates the potential of an integrated approach involving Yagya Therapy for the management of symptoms similar to those found in Crohn's disease.

According to Ayurveda, a healthy human body is supposed to have a relatively stable equilibrium (congenial homeostasis) of Dosha (psycho-biological rhythm - Vata, Pitta, Kapha), Dhatu (body tissues) and Mala (excreta) (40); Acharya Sushruta defines health as an equilibrium of Dosha (psycho-biological rhythm), Agni (digestion and metabolism), Dhatu (body tissues), Malakriya (excretory function), as well as the well being of soul, senses and mind (40). Imbalance in this equilibrium leads to disease, and the aim of the therapy is to restore this balance. Treatment of disease involves procedures for purifying the biological system by removing the vitiated elements from the entire body, and thus causing disease prevention, as well as health promotion (41).

As per the classical texts of Ayurveda (33,34,35), Pachak Pitta, Saman Vayu and Kledak Kapha are responsible for proper digestion (Ch. Chi. 15/6-8) (35); vikriti (vitiation) of these Doshas, leads to various diseases like indigestion, diarrhea, etc. Once
the Jatharagni (digestive fire) becomes dooshit (vitiated), it is not able to even digest small amounts of food; this undigested food becomes shukta (acid) (Ch. Chi. 15/44) (35), which is harmful like poison, and can lead to various types of diseases of the gastrointestinal tract (33,34,35). Since the vitiation of these Doshas can be one of the primary cause of the observed symptoms of the disease in the present study, hence, treatments that balance these Doshas can be recommended for the management of the observed symptoms (33,34,35).

In Yagya Therapy, the hawan-samagri (mixture of medicinal herbs) contained herbs, which were chosen based on careful review of Ayurvedic pharmacology, modern pharmacology, and scriptural indications. The beneficial properties of some of the herbs with regards to the management of symptoms similar to those of Crohn's disease, are as follows:

Sharapunkha (Tephrosia purpurea) and Kalmegh (Andrographis paniculata) have Pittasarak (promote excretion of Pitta) properties (36,42); Sharapunkha is commonly used in liver diseases (45); Kalmegh (Andrographis paniculata) has been used for liver diseases (46), dysentery (47), etc.

Kutaki (Picrorhiza kurroa) (45) and Apamarg (Achyranthes aspera) have Pittavirechaka (eliminate excess Pitta) properties (36,42)

Jamun (Syzgium cumini) has Kapha Pitta Shamak (pacifying) properties (36,42)

Makoy (Solanum nigrum) has Tridosha Shamak (pacifies all the three Doshas) and Rasayan (provides rejuvenation and nourishment to the body tissues) properties (36,42)

Kutaki (48) and Pippalimula (Piper longum) have Deepan Pachan properties (36,42); Deepan Pachan drugs are administered for enhancing the digestive fire (43,44) and digestion of the ama dosha (undigested toxins of the body that are responsible for the blockage of micro-channels).

Thus, the ingredients of hawan-samagri have properties of balancing the above mentioned Doshas, as well as providing rejuvenation, and nourishment to the body tissues. Their vapors help in the treatment of the symptoms similar to those found in Crohn's disease (24,36,42).

Besides, the other contributing factors for benefits of Yagya Therapy are nasal administration of herbs, use of ghee, use of mantras, advantage of fire, creation of healthy air and environment, role of pranayam, etc. These factors and their mechanistic roles are previously described in details (49-51).

Patient took the decoction of the Yakrit and Pleeha Vikar Nivarak hawan-samagri, twice daily. As described above, the ingredients of the Yakrit and Pleeha Vikar Nivarak hawan-samagri have properties of balancing the above mentioned Doshas, as well as providing rejuvenation, and nourishment to the body tissues. Thus, the decoction of the hawan-samagri must have provided these therapeutic benefits as well.

Conclusion

Before starting the integrated approach involving Yagya Therapy, the patient used to have severe pain in the abdomen, had swelling and stiffness in legs, had constipation, as well as weight loss; after taking the integrated approach involving Yagya Therapy, there was significant relief in the pain, the swelling in the legs was completely resolved, the stiffness in the legs had reduced, constipation was significantly reduced, as well as there was slight increase in weight. Earlier, because of weakness, the patient had difficulty in walking, changing posture from sitting to standing and vice versa, changing side while lying down; after taking the integrated approach, the patient feels an enhanced strength in his legs, has started walking on his own, can change posture from sitting to standing and vice versa on his own, can change side while lying down on his own. Overall, there was definite improvement in the condition of the patient. Thus, the present study shows encouraging result with regards to the effectiveness of integrated approach involving Yagya Therapy in the management of symptoms similar to those found in Crohn's disease.

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Compliance with ethical standards
Informed consent was obtained from the patient's representative (son).

Conflict of interest
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