

Ayurvedic Management of Hirschsprung's Disease - A Case Study

Case report

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Abstract

Hirschsprung's disease is a congenital disorder of large intestine in which certain ganglionic cells are absent in a particular segment of colon resulting in absence of peristalsis. The lack of movement of intestine and the failure of relaxation of internal anal sphincter produces varying degree of intestinal obstruction, which results in symptoms like-constipation, abdominal distension, nausea and loss of appetite etc. In allopathic medical science the treatment is surgical removal of the affected area followed by anastomosis.

In present case study an *Ayurvedic* approach was considered by analyzing the factors involved at the level of *dosha-dushya* and *srotas* for the disease. And the line of treatment was planned as *deepan-pachan*, *snehan*, *swedan*, *mridu samshodhan* with *basti*, *mridu virechaka aushadhies*, *vata-anuloman* and *pathya ahara-vihara*. By following this, encouraging results were obtained in this case with regular bowel pattern and relief in other symptoms.

Keywords: Hirschsprung's disease, Ganglionic cells, *Snehan*, *Swedan*, *Basti*, *mridu virechaka aushadhies*, *vata-anuloman*, *pathya ahara-vihara*

Introduction:

Hirschsprung's disease is a congenital aganglionosis of large intestine. During embryogenesis, the failure of migration of neuroblasts into gut wall results in this condition.(1) Hence an aganglionic segment is left that lacks both the Meissner submucosal and Auerbach myenteric plexuses.(2) The internal anal sphincter is aganglionic in every case of this disease.(3) Approximately 80% of cases involves recto-sigmoid junction and 15% have aganglionic segment extending

as far proximally as the hepatic flexure.(4) It occurs in approx. 1 in 5000-8000 live births & predominates in males in ratio of 4:1.(5) The peristaltic waves of bowel proximal to affected lesion try to propel the stool through obstructing aganglionic segment resulting in gradual dilatation and hypertrophy of proximal segment(also known as Megacolon). The mucus lining of dilated intestine may become chronically inflamed and ulcerated. The absence of peristalsis in affected segment and failure of relaxation of internal sphincter leads to adynamic intestinal obstruction.(6) The other presenting features are-

1. Constipation
2. Abdominal distension
3. Vomiting
4. Intermittent episodes of severe constipation and diarrhea
5. Visible peristalsis

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Few cases do not present with these symptoms until childhood or adolescence.

The diagnosis is confirmed by barium enema, anorectal manometry and rectal biopsy. The treatment of this disease consists of surgical removal of abnormal section of colon followed by re-anastomosis.

Case Report

A male patient of age 40 yrs, having the history of chronic constipation since birth, irregular bowel habit, loss of appetite, distended abdomen came to take the ayurvedic management of the disease. He had chronic constipation with passing of stool once or twice in a month with the help of strong laxatives and manual removal of feces. By barium enema and Colonoscopy, he had diagnosed as Hirschsprung's disease of sigmoid colon.

The abdominal examination revealed distended abdomen on inspection, hard and tender abdomen on palpation. On percussion there was resonant sound on upper abdomen and dull note on lower abdomen. The other vitals of patient were stable. The patient did not able to take solid food like *chapatti*(wheat bread) etc. due to aggravation in constipation and hard stool.

As in allopathic medical science there is only surgical method to correct the disease but there is need of repeated surgeries due to chances of spreading the disease over further region of colon, also re-occurrence of the disease is quite common. So to avoid all this, an ayurvedic approach was considered for the management of this disease.

The symptoms of the disease indicate that there is vitiation of *apan vayu* in *guda* and *pakwasaya*.(7) The condition can also be correlate with *baddhagudodar* due to *udavarta*.(8) So the line of treatment was planned as mentioned in *Gudagata vata*, *pakwasayagata vata* and *baddhagudodar* in our classics. The

combination of treatment of above said diseases proved to be very beneficial in the present case study.

Treatment Given–

The treatment of the *gudagat* and *pakwasayagat vata* and *baddhagudodar* is *Udavart har kriya* (9) (10), so line of treatment of *udavart* i.e. oil massage, sudation, *varti*, *niruha basti*, oral administration of *sneha* & *virechana* medicine and beneficial *ahara* to promote *apan vayu anuloman* was adopted in this case. (11) Also there is involvement of *Annavaha*, *rasavaha* and *malavahi srotas so langhan*, *deepan pachan* and *awgahan* was incorporated in the treatment.(12)

Therefore the total 16 days therapy was planned for the patient. In first half the patient was given oral medicine for *deepan pachan* with *panchkola churn* 2 gms twice a day empty stomach with lukewarm water and *chitrakadi vati* 2 tablets thrice a day before meal.

Besides oral medicines, the patient was kept on *Yoga basti* with prior *abhyanga – swedana* for 8 days, having 5 *matra basti* and 3 *niruha basti* each on alternate day.

The *Matra basti* was given with *erand tail* 50 ml after meal after adding with 1 pinch *hingv* and 1 pinch *saindhav*.

The *Asthapan basti* was given empty stomach when the previous taken food is digested. The contents of *Asthapan basti* includes-

- Honey- 50 ml
- *Saindhav* -5 gm
- *Dashmula oil*- 60 ml
- *Puti-yavani kalka*- 20 gm
- *Triphala kwath* – 250 ml

During the course of this therapy, the patient was having stool on each *asthapan basti* day i.e. on alternate day, although the retention time of *asthapan basti* was more in comparison to usual, some time the hot water bag fomentation

was required to induce motion but with no need of *phal varti* or *tikshn basti* for *basti pratyagaman* ever. During the course of therapy the patient started to take light meals like 1-2 *chapati* soaked in *mung dal* in a single meal, without worsening of constipation.

Next week the treatment was revised with *udar basti* of *dashmula oil*, *awgahana* in *dashmula kwath* and continuation of similar *matra* and *asthapan basti* as planned in first half of therapy.

The tabular presentation of treatment in first and second half of therapy is as under

-:

TREATMENT IN FIRST WEEK	TREATMENT IN SECOND WEEK
1. <i>Deepan-Pachan</i>	1. <i>Udar basti</i>
2. <i>Abhyanga-Swedana</i>	2. <i>Awgahana</i>
3. <i>Yoga basti</i> with <i>Matra</i> and <i>Niruha basti</i>	3. Similar <i>Matra</i> and <i>Niruha basti</i>

After completion of 16 days course of this therapy, the relief in signs and symptoms was as follows -:

SIGNS/SYMP TOMS	BEFORE TREATMENT	AFTER TREATMENT
Constipation	Severe, unable to pass stool daily	Able to pass stool daily
Ease	With great efforts, or manual extraction was required	Less efforts were required with no manual extraction
Consistency	Very hard initially, than loose	Medium consistency throughout
Frequency of	Once or	Passing

stool	twice in a month	stool daily
Appetite	Poor	Improved
Intake capacity	Unable to take solid food. Taken only liquid diet	Able to take 3-4 <i>chapati</i> in a day
Distension of abdomen	Very distended, hard and tender	Normal contour, soft, non-tender
Body Strength	Weak	Improved

The patient was discharged with *shaman* medicines as *phaltrikadi kwath* 50 ml twice a day empty stomach, *avipattikar churna* 3 gm twice a day before meal with luke warm water, capsule *ashwagandha* 500 mg twice a day with milk, *mahasankha vati* 250 mg *twice a day* after meal with lukewarm water. Combined use of *Isabghul husk* and *haritaki churn* with lukewarm water at bed time. The patient was advised to take lukewarm cow milk daily twice a day and encouraged to take light and easily digestible food items like *mung dal*, *dalia*, *chapati* and increased intake of water. He was advised to follow the *pathya-apathya* as mentioned. The patient was called after 3 months for further follow-up.

Results -

After 3 months, the patient came with good faith in *Ayurveda* with a healthier outlook. According to patient, he had been passing stool daily without much effort with medium consistency. The appetite was improved and he was able to take regular meals. The patient also gained 2 kg of weight. Again the patient was planned for *kaal basti* for 16 days. Presently the patient is much better with relief in his symptoms and clinical complaints.

Discussion

Probable Samprapti –

Hirschsprung's disease is a congenital disorder. In *Ayurveda*, the congenital disease comes under *janmbala pravritta roga*, which occurs due to *mithya ahara-vihara* (undesirable activities) by pregnant mother.(13) It leads to vitiation of *agni*, resulting in formation of *dushit annarasa*. This abnormal *rasa* when nourish the foetus, vitiates the *jatharagni* and inturns vitiates the *annavaha, rasavaha and malavaha* srotas of foetus. So there is abnormality at the level of *agni* and *srotas* in new born by birth. As the vitiated *doshas* circulate in the body and where they find the '*Kha-vaigunya*', they lodged there to produce the disease.(14) So there is probability of *rasa dusti, mala dusti, annavaha-rasavaha and malavaha sroto dusti*, resulting in vitiation of *vata* in *Guda* and *pakwasay*.

If we analyze the symptoms of above said *dusti janya dhatu* and *srotas* than we find the symptoms like- loss of appetite, nausea, vomiting, fever, emaciation, obstruction of stool or increased frequency of stool, expulsion of stool with noise, very hard stool with much efforts or loose stool which seems to be similar with the Hirschsprung's disease. (15), (16)

Chikitsa Siddhant & Mode of Action

The factors influencing the disease were *mandagni*, vitiated *apan vayu* and *sroto-avarodh*, so the line of treatment was adopted to correct the *agni*, to maintain the *prakrit stage of Apan vayu*, and *srotoshodhana* (purification of the channels).

The *panchkola churna* and *chitrakadi vati* are potent *agnideepak, amapachak* and correct the *Agnimandya*. The *abhyanga- swedana* helps to control vitiated *vata* of body. For the treatment of vitiated *vata*, there is none other treatment except *Basti*(17).

The vitiated *vata* is the responsible factor for the obstruction or excessive motion of any bio-humor, which can be best treated with *basti*. The *basti* helps in excretion of *mala, pitta, kapha, vayu and mutra*, strengthening the body, and curing all the diseases.(18) The principle seat of *vata* is *pakwashaya*. The active principle of *basti* given in *pakwasaya* reaches to whole body through micro-channels just as water irrigated in root circulate in whole plant.(19) It could be proved by the fact that besides local action it exerts more systemic action probably influencing Autonomic nervous system through Enteric nervous system around Gut.(Gut Brain theory). It is also a matter of fact that *basti* therapy by virtue of its medicaments greatly influences the normal bacterial flora of colon, which is responsible for synthesis of vitamin B₁₂. This vitamin B₁₂ may have a role in maintenance and regeneration of nerves.(20).

For *matra basti erand tail* (castor oil) was used because it is a good laxative and *vata kapha shamak*. For *asthapan basti*, *Dashmula* oil was taken as it is best *vata shamak*. The *Triphala kwath* was taken to facilitate *koshta shadhan*.

In the next round of therapy, *udar seka* and *awgahan* were used to provide *swedana*, because they help to pacify the *pakwashayagat* and *gudagat vata*. For which *dashmula* oil and *kwath* were used respectively to control vitiated *vata*.

The *shaman* medicines include *phalatrikadi kwath* because it works as *agni deepak* as well as *sroto shodhak*. It also improves the appetite. The *Aswagandha* was given as it is *balya, pustikara* and improves immunity. *Mahashankh vati* helps to control *shula, anaha, adhman* by *vatanuloman*. It neutralizes the hyperacidity and excessive gas formation. The *isabghul* and *haritaki* at bed time works as *nitya virechan*.

The *pathya* and *hitkar bhojhan* further help to maintain the advantages gained by treatment.

Conclusion:

Thus by the above case study it is concluded that the Hirschsprung's disease can be correlated with *gudagata* and *pakwasayagata vata*, the line of treatment is Udavarthar chikitsa .when udavarthar chikitsa was given to the patient, he responded well in every aspect of disease. The patient is still under follow-up without any significant complaint and with no need of surgery.

After taking *shodhana* two times at interval of 3 months, the patient is on *shamana* medicine and *pathya ahara* since 1 year with regular bowel habit and normal daily routine. It was an effort to provide a safe and effective management to patient, he is responding well clinically, but anatomically the ganglion can regenerate or not- is the further subject of advance research.

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