# Role of Vyana and Apana vayu in Parikartika W.S.R.T. Fissure-in-ano

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# Abstract:

Fissure-in-ano is commonly occurring disease in modern era. It's high incidence is due to modern lifestyle changes. There is formation of wound and feeling of severe pain at anal region. Due to this, this disease is more troublesome to the patient. To cure this, we have to first identify the causative factors and the pathophysiology of this disease. It came to known that Apana vayu and Vyana vayu are Vitiated in the Fissure-in-ano i.e. Parikartika. So there is need of correction of this two Vata. Modern treatment have adverse effects. So there is need of Ayurvedic approach to cure this disease and prevent recurrence. It is advised to give Snehayukta anulomana with dipana and shodhana drugs. So present study is an attempt to focus on this pathophysiology and line of treatment.

Keywords: Fissure-in-ano, Parikartika, Apana vayu, Vyana vayu.

## **Introduction:**

Rissure-in-ano is the commonly occurring condition showing severe pain in the anal canal. In this, there is longitudinal tear occurs over the skin of anal opening. Usual site for this is the posterior midline of anal margin. It is usually situated below the dentate line and confined to the anoderm. In Ayurveda, the *Parikardika vyadhi* can be correlated with Fissure-in-ano.

# Aims and Objectives – Aim:

• To study the role of *Apana vayu* in *Parikartika* W.S.R.T. Fissure-in -ano.

### **Objectives:**

- To study the concept of *Parikartika* according to Ayurveda.
- ❖ To study the concept of *Apana vayu* according to Ayurveda.
- To study the concept of Fissure-in-ano.

### Material and methods -

- ❖ Literary review of *Parikartika* and *Apana* vayu in all *Ayurvedic* texts.
- Review of available information regarding Fissure-in-ano.
- Review of internet material, Journals, magazines and previous research papers related to this subject.

# Review of literature:

### Fissure-in-ano

# **Types and Causative factors:**

Generally Fissure-in-ano is of two types –

- 1. Primary/ Simple/ true Fissure-in-ano: In this, the tear does not cross the dentate line. This fissures are typically benign type and can be related to local trauma such as hard stools, prolonged diarrhoea, vaginal delivery, repetitive injury or penetration.
- Secondary/ Specific This found in patient having history of previous anal surgical procedures, Inflammatory Bowel Disease (e.g. Crohn's disease), Granulomatous disease (e.g. Tuberculosis, sarcoidosis), some infections (e.g. HIV/AIDS, Syphilis).<sup>2</sup>

## Pathophysiology:

Resting pressure is the pressure in anal canal which is regulated by tonicity of internal anal sphincters. This pressure is elevated to twice value in case of Fissure-in-ano. <sup>3</sup> This causes the chronicity in the Fissure-in-ano. This increased resting pressure causes searing or tearing type of pain in the anal canal during a bowel movement. After the passing of stools, the pain continues as a dull ache or there may be tightness in anal canal lasting for several minutes to hours. But recently it is found that, the application of local anaesthetic gel does not relieves this elevated pressure and there is continuation of spasm in anal canal which leads to formation of Fissure-in-ano. <sup>4</sup>

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VOL- VIII ISSUE- XII DECEMBER 2021 PEER REVIEW IMPACT FACTOR ISSN e-JOURNAL 7.149 2349-638x

Previously, there was assumption that spasm is due to contraction of internal anal sphincter and the best remedy for this is Lateral internal sphincterotomy (LIS) wherein there is partial division of the internal anal sphincter away from the fissure site. 5 However, if we record the resting anal pressure in the case of lateral sphincterotomy, the pressure reduces greatly under the influence of local anaesthesia. But this resting pressure increases rapidly after the effect of local anaesthesia passes away. So it is clear that, this increase in resting pressure is not due to internal anal sphincter contraction. Any damage to the anal mucosal causes hypersensitivity of the contact receptors of the anal – external sphincter continence Reflex, resulting in the overreaction of the reflex. This overreaction causes Contraction of internal anal sphincter. This in turn leads to increase in resting anal pressure, diminished anodermal blood flow and ischemia. This ischemia prevents anal fissure from healing. 6

## **Symptoms:**

- Pain, sometimes severe, during bowel movements
- Pain after bowel movements that can last up to several hours
- Bright red blood on the stool or toilet paper after a bowel movement
- ❖ A visible crack in the skin around the anus
- ❖ A small lump or skin tag on the skin near the anal fissure

#### Parikartika:

Parikartika, in Ayurveda, can be correlated with Fissure-in-ano. The term *Parikartika* is derived from the root word '*Parikrt*' which denotes to cut around. <sup>8</sup> *Parikartika* term is seen in many disease conditions such as *Udavarta*, <sup>9</sup> *Purvarupa* of *arsha*, <sup>10</sup> *Jirnajwara* <sup>11</sup>, *Atisara* <sup>12</sup> and *Vataj Grahani*. <sup>13</sup> It also arises due to complications of *Shodhan* karma like *Virecahan karma* <sup>14</sup> and *Basti karma*. <sup>15</sup> This all above said conditions contains one common symptom, severe pain at anal region. <sup>16</sup> The causes for it can be classified into two types, namely alteration in normal bowel evacuation Physiology and iatrogenic causes.

Alteration to normal physiology of bowel evacuation occurs as hard stool in *Varchasavarta vata* or as in loose soft stool in *atisara*. It leads to severe pain with bleeding. Also it may be due to

complications of giving *tikshna virechana* or *Basti* treatment in *mrudukoshtha* Patients. Iatrogenic causes mainly includes trauma to the anal region such as *Bastinetra dosha*. <sup>17</sup> In both those conditions, it is caused by severe anal pain. This pain is similar to the pain in Fissure-in-ano. This two causes leads to formation of damage to anal mucosa. The skin of anal region does not contain hairs, sweat glands or sebaceous glands like other skin. This skin contains a large number of sensory nerves that sense light touch and pain and abundance of these nerves makes Fissure-in-ano very painful.

# Samprapti : "

After knowing that both hard stool and loose stool can cause injury to anal canal. Here *Vyana* Vayu and *Apana vayu* are Vitiated. The site of the wound is due to presence of these two *Vata*. *Vyana vayu* is responsible for *Gati- prasaran – Akunchana – utksepa – Avaksepa – nimesha – umesha* in the body. <sup>18</sup> Here gati means all the actions in the body according to *Indu*. <sup>19</sup> Thus the action of propulsion of faecal matter into the anal canal can be related to *Vyana Vata*. So vitiation of *Vyana Vata* can cause increased muscular action or for a spasmodic action.

The function of Apana vayu is mentioned as Vinmutradi Nishkramankriya. <sup>20</sup> Thus the expulsion of faecal matter through anus is a function of Apana vayu. Due to this, defect in normal expulsion of Faeces (action of Apana vayu) occurs as a result of increase spasm of anal musculature (due to increased action of Vyana vayu). The sequential effects of Vyanavarta apana is mentioned as impaired function of Apana vayu which leads to reversing the action of Apana vayu causing Vamana, adhmana, udvartana, gulma in higher sites and Parikartika in it's own site. <sup>21</sup>

The altered bowel factors or iatrogenic factors causes *ttrauma* in the anal musculature resulting in the formation of wound. This initial *abhighta* to the anal musculature causes *sadyovrana* which is *agantu* hetu. This agantu *hetu* first causes vitiation of *Vata* and *Rakta*. <sup>22</sup> Site of injury is skin of anal region and skin is the main location of *Vata*. Also there is reference in the commentary that *spanshanam* means skin. In case of *Charmakilam*, *Vyana vayu* along with *Kapha dosha* causes the disease. So by this, it is clear that *Vata* situated in

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the skin in *Vyana vayu*. So gist is that vitiation of *Vyana vayu* causes disturbance to the function of *Apana vayu* and both together causes *Parikartika* at the same site.

## Role of Vyanavarta Apana:

Here we have seen two main terms like vrana which is initial cause and vitiation of Vyanavarta apana which is the cause of persistence of the fissure. We have to look care of these two factors while treating the Parikartika. A mere vrana shodhana and ropana can not be sufficient in dealing skin injury. The consequences of this resulting in Vyanavarta apana has to be tackled as avarana will prevent the normal functioning of Apana vata. Such an obstruction to the normal physiological function of stool evacuation further deteriorates avarana and increased Vata will adversely affects the vrana. Due to this, in addition to shodhana and ropana, we have to give snehayukta anulomana also to be planned. Once the reason for persistence noted, it can be treated and healed easily.

### **Discussion and Conclusion**

The knowledge of any disease can be attained by knowing the detailed pathophysiology of it. If this pathophysiology is broken, the disease can be healed early and easily. It is the best plan to cure the disease and prevent the reoccurrence of the disease. In Ayurveda, there is no detailed description available of *Parikartika*. If the burning pain causing condition is taken as injury around the anal regions, the main cause can not be identified. So to know the possible steps of persistence of this disease, the focus were done on *Vyanavarta apana*. By this, it is clear that Parikartika is not merely a wound but it is the cause for Vata vitiation and further avarana causes the persistence. So ideal treatment includes snehayukta anumolamana with shodhana & ropana medicines. The incidence of Fissure-in-ano is on the rise due to our modern lifestyle changes. By knowing that, this condition is caused by the combination of two factors namely Vyana vayu and Apana vayu and their role in further persistence of fissure, it can help in fast healing and preventing recurrence of the disease.

# **Bibliography:**

1. Klosrerhalfen B., Vogel P., Rixen H. And Mittermayer C., Topography of the inferior rectal artery: a possible cause of chronic, primary anal fissure, Diseases of the colon and rectum, 1989, 32:43-52. 10.1007/BF02554625.

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7.149

- Lund J. N. And Scholefield J.H., Aetiology and treatment of anal fissure, the British Journal of Surgery , 1996;83:1335-44. 10.1002/bjs. 1800831006.
- 3. Gibbons C. P. And Read N. W., anal hypotonia in fissures cause or effect? The British Journal of Surgery, 1986,73:443-5.
- 4. Farouk R., Duthie G.S., Mac Gregor A.B. and Bartolo D. C., sustained internal sphincter hypertonia in patients with chronic ana fissure, Diseases of the colon and rectum, 1994,37:424-9.
- 5. Devi G. R. AND Sivakumar V. V., A comparative study between lateral sphincterotomy abs Diltiazem application for anal fissure regarding pain, bleeding and healing (IOSR- JDMS) e- ISSN: 2279- 0853, p- ISSN: 2279- 0861. Vol. 16, Issue 10 Ver. XI (Oct. 2017), p 1-14 www.iosrjornal.org
- 6. Van Meegdenburg M.M., Trzpis M., Heinenan E. And Broens P. M., (2016) Increased anal basal pressure in chronic anal fissures may be caused by overreaction of the anal external Sphincters continence Reflex, Medical Hypotheses, 94:25-29, doi: 10.1016/I.mehy.2106.06.005.
- 7. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint Edition 2017, part I, page no. 187.
- 8. Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 624.
- 9. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part I, page no. 307.
- 10. Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 97.
- Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 466.
- 12. Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 370.
- 13. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part I, page no. 187.
- 14. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit

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Aayushi International Interdisciplinary Research Journal (AIIRJ)

VOL- VIII ISSUE- XII DECEMBER 2021 PEER REVIEW IMPACT FACTOR ISSN e-JOURNAL 7.149 2349-638x

- Sansthan, Varanasi, Reprint Edition 2017, part I, page no.196.
- 15. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part II, page no.290.
- 16. Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 916.
- 17. Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 63.
- 18. Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 63.
- Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 63.
- Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 719.
- 21. Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 192.

