

MANAGEMENT OF RADIATION PROCTITIS BY PICHHA BASTI & AYURVEDIC FORMULATIONS – A CASE REPORT

Chandrakant. A. Dhanokar¹, Ravi. S. Ailani², Vipul. P. Kanani³

¹MS (Shalya), Ph.D (Scho) Asst. Prof. Dept. Shalya, R.T. Ayu. College, Akola

²MS (Shalakyia), Ph.D (Scho) Asst. Prof. Dept. Shalakyia, R.T. Ayu. College, Akola

³MD (Nidan), Prof & HOD Department of Roga Nidan, R.T. Ayu. College, Akola, Maharashtra, India

Email: jagdishdhanokar2010@rediffmail.com

ABSTRACT

Introduction: Radiation proctitis is the inflammation of rectum as a result of exposure to radiation during radiotherapy. It is feared complication of radiation therapy given in pelvic malignancies. Chronic radiation proctitis (CRP) is relatively late complication that affects 5-20% of cancer patient. Bleeding predominant CRP is difficult to manage in spite of all modern advances like endoscopic argon plasma coagulation, laser coagulation etc. Moreover these procedures are available at higher centers only & are associated with procedure related complications. One of our patients of bleeding predominant CRP who didn't get relief by modern medical treatment got significant result by ayurvedic management. **Methods & Materials:** Two sittings of *pichha basti*, tab. *Guduchi ghan vati* 500mg bd, *Nagkeshar*, *Lodhra* powder 2. 5gm each bd, Tab. *Chandrakala rasa & triphala* powder 5gm bd was given to the patient. **Result & discussion:** *Pichha basti*, *triphala* powder, *guduchi Ghana vati & chandrakala rasa* can significantly control the bleeding per rectum in bleeding predominant chronic radiation proctitis.

Keywords: *Pichha Basti, Adog Rakta Pitta, Triphala Churna.*

INTRODUCTION

Radiation proctitis is the inflammation of rectum as a result of exposure to radiation during radiotherapy.^[1] It is a known feared complication of radiation therapy (RT), in urological, gynecological & gastrointestinal malignancies in which rectum & anal canal may get exposed to ionizing radiation. Two forms of radiation proctitis can be seen i.e. acute & chronic. Symptoms occurring in first few weeks after RT are called as acute radiation proctitis. Symptoms include diarrhea & tenesmus. It occurs in almost all patients & is usually self limiting.^[2] Symptoms usually re-

solves or improves after butyrate enemas³. Chronic radiation proctitis (CRP) is a relatively frequent late (occurring after 3 – 6 months, years or even decades after radiation therapy) complication that affects 5-20 % of cancer patients.^[4-6] Symptoms of CRP are similar to acute form but PR bleeding is the most prominent & common symptom. This leads to potential iron deficiency anemia requiring blood transfusion. In addition patient may have symptoms of obstructed defecation due to stricture formation like

constipation, rectal pain, urgency & rarely fecal incontinence due to overflow.^[7]

Chronic radiation proctitis should be suspected in any patient who has pelvic RT & presents with the symptoms mentioned above, even if radiotherapy took place years ago. Diagnosis by endoscopy is important to exclude other causes of proctitis like infectious colitis, inflammatory bowel disease, ischemic colitis & malignancy etc. Endoscopy is also important to determine the extent & severity of CRP. There are three main forms of endoscopic findings in CRP i.e. Inflammation predominant form (I-CRP), Bleeding predominant form (B-CRP) & mixed form.^[8-10]

Treatment of CRP can broadly be divided in to medical therapies, endoscopic therapies, & surgical interventions. Type of treatment to be given depends on endoscopic finding & category of CRP. A wide variety of interventions have been tried for treating CRP. There is no large randomized trial to evaluate the treatment of CRP. Also several studies have resulted in ambiguous outcome measurements, showing no structured outcome to compare findings from different trials.^[11] Medical treatment includes sucralfate enema, metronidazole, vitamin A & hyperbaric oxygen therapy. It is main stay for I-CRP. For bleeding predominant CRP endoscopic procedures are effective. Endoscopic therapies include argon plasma coagulation (APC), topical formalin, laser, heater, & bipolar probes. Surgery is considered to be last resort for patients with CRP & is reserved for those who are found to have a stricture, permanent bleeding, perforation or fistula that is not responding to medical & endoscopic approaches.^[12]

Endoscopic procedures like APC are available at higher centers only & are associated with complications such as bowel explosions deep ulceration, fistula & stricture formation.^[13, 14] Topical formalin may cause chemical burn if spillage is there.

In spite of all these advance treatment some patients of bleeding predominant chronic radiation proctitis doesn't respond. One of our patient of CRP who didn't get relief by modern medical management got

significant relief by *pichha basti*, *Guduchi ghan vati* & *triphala churna* (powder). This case illustrates the role of ayurved in the management of radiation proctitis particularly in those patients who are refractory to get relief by modern management.

Case study:- A 52yrs old lady K/C radiation proctitis presented to our institute attached ayurved hospital at *shalya* (surgery) opd with following complains-

C/O- Severe bleeding PR since 2 months, weakness since 1 month, cramps & pain in calf muscles since 1 month.

History of present illness (H/P/I) – patient was apparently alright one year back suddenly she got profuse white discharge PV, she consulted local gynecologist. She was investigated for Pap smear. It revealed ca cervix. As it was early ca cervix she was advised local radiotherapy. After receiving radiotherapy for 30 days she was advised follow up. Six months after radiotherapy she suddenly started bleeding PR, frequency of motion. She was referred to superspeciality gastroenterology dept. of govt. medical college, Nagpur. On colonoscopic examination she was diagnosed to have bleeding predominant chronic radiation proctitis. She received prednisolon retention enema but she was unable to retain it & used to defecate just 10mins after giving enema. She got relief in frequency of motion but bleeding per rectum was continued.

So she consulted at our hospital for ayurvedic management.

P/H- No h/o of DM, HT, IHD, H/O- radiotherapy for ca cervix 6 month back.

F/H- Not significant

Personal history- not significant.

Drug history- allergy to any drug yet not known.

O/E- GC- mod, afebrile, pallor +++++, No ecerus, No cyanosis, P- 88/min, B.P.- 130/90, CVS – S1 S2- NAD, RS- Chest clear, air entry equal on both sides, CNS- Conscious oriented.

Her Hb was 4% only. So we admitted the patient for blood transfusion. Two units of whole blood were transfused to the patient on two consecutive days.

Orally tab. Chandrakala rasa 250mg, 1 bd, tab. Guduchi ghan vati 500mg 2 bd, Triphala churna 5gm bd with lukewarm water was given. Lodhra 2.5gm + Nagkeshar 2.5 gm bd with butter was also given. After giving two blood transfusions from third day of hospitalization inj. orofer s 100mg in 100ml NS alternate day & inj. vitcofol 2cc deep i.m. alternate day was given. Total five injections of orofer & vitcofol were given.

She was started *pichha basti* on 3rd day of hospitalization after giving two blood transfusions. 5gm of *mocharas*, 5gm *gairic* powder, *lodhra* & *nagkeshar powder* 2.5gm each was added to 150ml water & this whole mixture was added to 150ml of milk & was boiled till it comes to 150ml. Thus the whole water was allowed to evaporate & kshirpaka was prepared to administer it per rectally by drip method over 30 mins for 8 days. For this a 500ml glass bottle of IV fluid was used which was connected to plane rubber catheter 10 no. through iv set. Thus the basti was administered slowly over 30 mins. Snehan (gentle massage) & swedan (steam) was applied at lumbar & buttocks region before giving *basti*. Quantity of per rectal bleeding significantly reduced just from very first day after 1st sitting of basti. Oral medicines were continued during basti course. During basti course patient was occasionally having per rectal bleeding at the time of defecation. Patient was discharged after completion of basti course. She was given same ayurvedic medication. Syp. R.B. Tone 2tsf bd & cap. Caldikind (calcium carbonate 500mg) was added to ayurvedic prescription. On discharge her Hb was 9gm%. Weakness & calf muscle pain & cramp were reduced to some extent however she didn't get complete relief.

She was called for follow up after 7 days & continued above mentioned ayurvedic & modern treatment. She was alright for next 5 days but from 6th day after discharge she again had an episode of severe PR bleeding. On examination when she came for follow up vitals were normal. On proctoscopy rectal mucosa was congested. She was again started *pichha basti* with same ingredients as mentioned

above only triphala powder 5gm was added to it. *Basti* was given on opd basis. Again during the course of treatment she was occasionally having PR bleeding, but the severity was much less. This time *Guduchi Ghana vati* instead of 500mg bid three times a day was given. After completion of second course of *basti* she was much better. We continued the same treatment to her & called for follow up after 7 days. On second follow up she reported only two episodes of PR bleeding which was less in severity. Her hemoglobin was 10gm% on second follow up. Her weakness reduced she was feeling energetic. She got complete relief in cramps & pain in calf muscle. After second follow up haematinic & calcium preparation was stopped. She was advised to take tab. *Chandrakala rasa* 500mg bd, tab. *Guduchi Ghana vati* 500mg bd, *triphala churna* 5 gm bd with lukewarm water & mixture of *lodhra* 2.5 gm & *nagkeshar* 2.5 gm bd with butter for one month. She was again called for follow up after 15 days. On third follow up she reported 3 episodes of PR bleeding which less in quantity. The same treatment was continued to her for one month.

Thus the patient got significant relief by ayurvedic management in bleeding type of radiation proctitis.

DISCUSSION

Bleeding in chronic radiation proctitis is troublesome complication & sometimes becomes very difficult to tackle in spite of available modern treatment. It can be correlated with *adog raktapitta* & to some extent with *raktatisar* in ayurved. Here the frequency of defecation is not as that of frequency seen in *raktatisara*. Exposure of rectum to radiation during radiotherapy in this patient resulted in vitiation of local pitta at rectum. This was superadded by oily spicy, salty & sour diet of patient. She was habituated to take pickles, papad & spicy curry in her daily diet. This also resulted in *datushaithilya* (reduced immunity of rectal cells). Increased pitta & datushaithilya caused shotha (inflammation) of rectal mucosa resulted in proctitis. As the time passed vitiated pitta along with rakta (blood) caused endart-

eritis in rectal mucosa which resulted in ischaemia, ulceration of rectal mucosa which finally resulted in CRP leading to bleeding per rectum. Thus bleeding predominant CRP developed in this patient. This is the probable *samprapti* (Ayurvedic Pathophysiology) which might have occurred in this patient.

As the patient was severe anemic we gave her two blood transfusions first. Stopping bleeding was prime responsibility so *lodhra* (*Symplocos racemosa*) & *nagkeshar* (*Mesua ferrea*) as a hemostatic was started. Both *lodhra* & *nagkeshar* are having *kashay* rasa (astringent property) which results in hemostasis.^[15] Both of these drugs are used in various bleeding conditions like bleeding piles, *raktatisar-pravahika* (diarrhea, dysentery associated with bleeding PR). *Pichha basti* is indicated by charaka in *raktatisara* & *kapha atisara*.^[16] *Mocharasa* which is used in this basti has also good astringent property. *Mocharasa* is gum resin of *shalmali*^[17] (*Salmelia malberica*). We also added *gairic* powder (red ochre) to it. This is also astringent, anti-inflammatory, has cooling action, gives relief in burns ulcers, boils & pustular eruption.^[18] *Lodhra*, *nagkeshar* again was added to ingredients of *pichha basti*. Milk in basti gives strength, pacifies pitta, and exhibits anti-inflammatory property.

Chandarkala rasa is supposed to be the best medication in pacifying pitta. As it contains ingredients that are having cool action (sheet virya).

Guduchi (*Tinospora cordifolia*) is good immunomodulator, builds up immunity, it also has anti-inflammatory property. It is also a very good anti oxidant property. Radiotherapy causes immunosuppression. All patients receiving chemotherapy & radiotherapy for any malignancy should receive *guduchi* for its immunomodulatory effect.

Triphala powder has also shown protective effect on radiation induced acute intestinal mucosal damage in animal experimentations.^[19] *Triphala powder* & *guduchi Ghana vati* if given to the patients in higher doses who is receiving radiotherapy for pelvic cancer can prevent radiation proctitis.

Thus bleeding predominant chronic radiation proctitis which is a feared complication of RT was managed by ayurvedic treatment.

CONCLUSION

Pichha basti, *triphala* powder, *guduchi Ghana vati* & *chandrakala rasa*, *lodhra* & *nagkeshar* powder can significantly control the bleeding per rectum in bleeding predominant chronic radiation proctitis. It is safe, effective & cheap method of treatment requiring minimum resources can be done on OPD basis.

Needs trial on larger no. of patients to draw appropriate statistical conclusion.

REFERENCES

1. Babb RR et al (1996) "Radiation proctitis: a review". Am Journal of gastroenterology 91 (7) : 1309 – 11. PMID 8677984
2. Weisenberg E. Radiation proctitis. www.pathologyoutlines.com
3. Vernia P, Fracasso PL, Casale V et al. (October 2000). "Topical butyrate for acute radiation proctitis: randomized crossover trial". Lancet 356 (9237): 1232 -1235. Doi: 10.1016/S0140- 6736(00) 02787-2 PMID 11072942.
4. Garg AK, Mai WY, McGary JE, Grant WH, 3rd Butler EB, The BS. Radiation proctopathy in the treatment of prostate cancer. Int J Radiat Oncol Biol Phys. 2006;66(5):1294-1305, doi: 10.1016/ijrobp.2006.07.1386 [Pub Med] [Cross ref]
5. Kuku S, Fragkos C, McCormack M, Forbes A "radiation induced bowl injury: the impact of radiotherapy on survivorship after treatment of gynecological cancers. Br J Cancer. 2013;1019(6):1504-1512. Doi: 10.1038/bjc.2013.491. [PMC free article] [Pub Med] [Cross Ref]
6. Krol R Smeenk RJ, Van Lin EN, Yeoh EE, Hopman WP. Systematic review: anal & rectal changes after radiotherapy for prostate cancer . Int J Color Dis. 2014;29(3):273-283. Doi: 10.1007/s00384-013-1784-8. [Pub Med] [Cross ref]
7. Shadad AK, Sullivan FJ, Martin JD, Egan L J, Gastrointestinal radiation injury: symptoms risk factors & mechanisms. World J Gastroenterology.2013;19

- (2):185-198. Doi: 10.3748/wjg.v19.i2.185. [PMC free article] [Pub Med] [Cross Ref]
8. Wu XR, Liu XL, Katz S, Shen B. Pathogenesis, diagnosis, & management of ulcerative proctitis. *Inflamm. Bowel Dis.* 2015;21(3):703-715. Doi: 10.1097/MIB.00000000000000227. [Pub Med] [Cross ref]
 9. Dorr W. Radiobiology of tissue reactions. *Ann ICRP.* 2015 [Pub Med]
 10. National cancer institute (2013) Common terminology criteria form adverse events (CTCAE)4.0 http://ctep.cancer.gov/protocol/Development/electronic_applications/ctc.htm. accessed 18 May 2015
 11. Denton A, Andreyev J, Forbes A, Nonsurgical interventions for late radiation proctitis in patients who have received radical radiotherapy to pelvis. *Cochrane Database Sys Rev.* 2002;1 [PubMed]
 12. Wu XR, Liu XL, Katz S, Shen B. Pathogenesis, diagnosis, & management of ulcerative proctitis, chronic radiation proctopathy, & diversion proctitis 2015;21(3):703-715. doi: 10.1097/MIB00000000000000227.
 13. Tieb S, Rolachon A, Cenni JC, et al. Effective use of argon plasma coagulation in the treatment of severe radiation proctitis. *Dis Colon Rectum.* 2001;44(12):1766-1771. Doi: 10.1007/BF02234452.[PubMed] [Cross Ref]
 14. Canard JM, Vedrenne B, Bors G, et al. Long term results of treatment of hemorrhagic radiation proctitis by argon plasma coagulation. *Gastroentrolol. Clin Biol.* 2003;27(5): 455-459 [PubMed]
 15. Dr. A.P. Deshpande, Dr. R. R. Javalgekar & Dr. S. Ranade, *Dravyaguna- vigyan (part 1 & 2)* Anamol publication Pune-2 , second edition 1992, page no. 374-376 & 831.
 16. Dr. Brahmanand Tripathi *charak samhita of Agnivesh* elaborated by Carak & Dridhabala vol. 2 chikitsa sthan chapter 19 shlok 94 page no 688 Chaukhamba Surbharati prakashan, Varanasi reprinted edition 2002.
 17. Dr. A.P. Deshpande, Dr. R. R. Javalgekar & Dr. S. Ranade, *Dravyaguna- vigyan (part 1 & 2)* Anamol publication Pune-2 , second edition 1992, page no 385-387.
 18. Dr. Anupama Gairic (Red ochre) www.bimbima.com.
 19. Won Sup Yoon, Chul Yong Kim, Dae Sik Yang et al Protective effect of triphala on radiation induced

acute intestinal mucosal damage in Sprague Dawley rats. *Indian Journal of Experimental Biology.* Vol. 50, March 2012, pp. 195- 200

Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Chandrakant. A. Dhanokar et al: Management Of Radiation Proctitis By Pichha Basti & Ayurvedic Formulations– A Case Report. *International Ayurvedic Medical Journal* {online} 2018 {cited August, 2018} Available from: http://www.iamj.in/posts/images/upload/1855_1859.pdf