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Research Article

USE OF APAMARGA KSHARA IN CONSTITUTION OF MODIFIED SCLEROSANT: A NOVEL INCLUSION UNDER KSHARA-KARMA (CHEMICAL CAUTERIZATION)

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ABSTRACT

Sclerosant are the agents that ensues the aseptic inflammatory response in the living tissue after administration. These are in practice for the management of various conditions. Albright solution in particular is indicated for the management of hemorrhoids and rectal prolapse. Phenol from the Albright solution is substituted with apamarga kshara in constitution of modified sclerosant. This modified sclerosant is popular among the surgical fraternity with better acceptability and outcome in the management of above said conditions. So an observatory survey was done in concern to the method of preparation, administration and outcome of the administration of this modified sclerosant.

Key Words: Sclerosant, Albright solution, Hemorrhoids, Phenol, Apamarga kshara.

INTRODUCTION

Sclerosant¹ is an injectable irritant that is used in the treatment of various surgical entities like hemorrhoids, reticular veins, telangiectasia and reticular veins, partial rectal prolapse, varicose veins etc. alone or along with other treatment modalities. It results in aseptic inflammatory response that ensue the iatrogenic fibrosis in the tissue concerned.

Following are the examples of Sclerosants which are in practice:

1. Detergents :

Sodium tetradecyl sulfate, Polidocanol, Sodium morrhuate, Ethanolamine oleate

2. Osmotic agents :

Hypertonic sodium chloride solution, Sodium chloride solution with dextrose

3. Chemical irritants :

Chromated glycerin , Polyiodinated iodine, Albright Solution

Sclerotherapy Treatment

Sclerotherapy is currently the treatment of choice for :

1. Hemorrhoids Ist & IInd degree.
2. Telangiectasia and reticular veins.
3. An adjunctive treatment for tributaries of the saphenous vein after saphenous obliteration by endo-venous laser, radiofrequency, or surgery.
4. Primary treatment for non-saphenous varicosities and saphenous veins, commonly using ultrasound assistance.

Composition of Albright Solution²

1. 5% phenol in almond oil
2. 140 mg of menthol (to make solution 30 ml)

1. To study the constitution the modified sclerosant using Apamarg- Kshara³ prepared from *Achyranthus aspera*⁴

instead of Phenol (from Albright solution) along with menthol and Almond oil in constituting the proposed modified sclerosant

2. To survey the efficacy of modified sclerosant in the management of the hemorrhoids particularly grade I & II popular among the medical fraternity.
3. To review and analyze available literature of Kshara-karma described in Ayurveda.

Previous work

The Role Of Submucosal Injection Of 5% Kshar Solution (Ksharodak) In Almond Oil For The Management Of Bleeding Piles (Raktarsh) With Special Reference To Redundant Mucosa. - By Dr. Ramesh Chand Arya, professor & head P.G. dept. of shalya tantra, H.P.G.I.P.G.E. & R., Paprola, kangra, H.P.

MATERIALS AND METHODS

The present study is an observational study including the method of preparation of modified sclerosant using *Achyranthus aspera* its administration in haemorrhoids & partial rectal prolapse along with survey of effect of intervention in the patients. Observations of the intervention of this modified sclereosant are done on the basis of survey made on the patients managed for haemorrhoids grade Ist, IInd & partial rectal prolapse undertaken by the surgical fraternity concerning National institute of Ayurveda Jaipur.

Use of Apamarga-kshara in constituting modified sclerosant

1. Ample description is available in the concerned textual books about the therapeutic usage of Apamarga-Kshara in Ayurveda.^{5,6}
2. So being a potent therapeutic agent Apamarga- Kshara prepared from *Achyranthus aspera* is used instead of Phenol

- (from Albright solution) along with menthol and Almond oil in constituting the proposed modified sclerosant.
- 50 mg of Apamarga- Kshara was dissolved in 3 ml of distilled water and is filtered through two layers of whatmann fine grade filler paper.

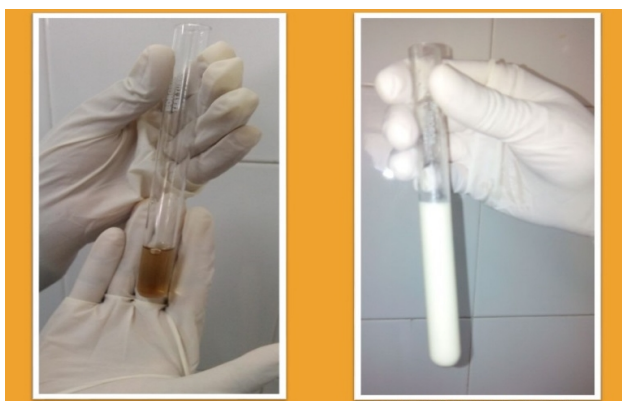


Picture 1 *Achyranthes aspera*

- 60 mg of menthol was added to the 7 ml of almond oil heated around 40 degrees centigrade over water bath.
- Afterwards Apamarga- Kshara containing distilled water was vigorously shaken with menthol containing almond oil to get a homogeneously mixed milky white solution of modified sclerosant.



Picture 2 Prepared Apamarg Kshar



Picture 3rd Apamarg kshar + Distilled water and Sclerosant containing Apamarg kshar

Therapeutic Application of Modified Sclerosant

Some clinical studies in concern to the administration of this modified sclerosant are in practice among surgical fraternity in;

- Hemorrhoids degree Ist and IInd.
- Partial rectal prolapse.
- Spermatocoele.
- Localized varices concerning venous insufficiency of lower limbs.

Method of Administration Of Modified Sclerosant ⁷

After routine preparation, patients were put in lithotomy position .The proctoscope was gently introduced in the anal canal & rectum to visualize the interior of distal bowel. Thereafter, the proctoscope was gradually withdrawn to see the hemorrhoid masses at or just above the level of Anorectal Ring.

Using the syringe with the bevel of Gabriel's needle directed towards lumen, loaded with modified sclerosant, solution was injected into sub-mucosal plane at the base of each pile mass at or just above the anorectal ring. Approximately 3 ml of the solution was given at each site. The solution spreads in the submucosa upwards to the pedicle and down words to the internal hemorrhoids and secondary hemorrhoids if present, it is prevented by intermuscular septum from reaching the external

hemorrhoids. Following similar method modified sclerosant was injected circumferentially at 4-5 points in sub-mucosal plane at or above the anorectal ring.

The recognition of precise injection was made by striation-sign⁸ i.e. mucosal and sub mucosal vessels were seen radiating from the yellowish background of wheel.

Varicose vein particularly the solitary varix the modified sclerosant is directly administered to emptied collapsed vein following the standard method of sclerotherapy for varicose veins.

OBSERVATIONS

The effects of intervention are observed on the parameter of:

- Amount of bleeding.
- Frequency of bleeding per anus.
- Degree of prolapse reveals significant improvement.

DISCUSSION

Probable Mode Of Action In Hemorrhoids & Partial Rectal Prolapse ⁹ could be explained on the basis of :

- Initial arrest of the bleeding owing to chemical thrombosis of the hemorrhoid plexus. it causes the target vein to

immediately shrink, and then dissolve over a period of weeks as the body naturally absorbs the treated vein

2. The aseptic inflammatory response owing to phenol and Apamarg-kshara as a result of cell damage with fibroblast proliferation leads to sclerosis (progressive fibrosis) in the sub-mucosal plane resulting to arrest of bleeding and fixation of hemorrhoid mass to gut wall.

CONCLUSION

Results of this modified sclerosant have been claimed to be very encouraging with certain benefits over other sclerosant used earlier particularly patient acceptability & other outcomes similar to the solution Albright's solution. To support the claim regarding this sclerosant prepared with Apamarga-Kshara there is lack of scientific studies. To establish its efficacy scientifically a thorough study including comprehensive drug analysis and experimental studies are required and are being planned.

REFERENCES

1. www.google.co.in/?gfe_rd=cr&ei=Z0CNVduFDcr08wfJ75KABQ&gws_rd=ssl#q=sclerosing+agents
2. Surgery of the Anus Rectum and Colon – john goligher 5th edition,(A.I.T.B.S. Publisher & Distributer) page no. 106
3. Kaviraj Ambikadutt Shastri, Sushrut Samhita with Ayurved tatva Sandipika Hindi commentary, Sutra sthan 11/11-14, Page no. 46,47 (Choukhambha Sanskrit Sansthan, Varanasi) 2010.
4. Dravya guna vigyana by Acharya Priyavrata Sharma- Edition 2006,(Chaukhambha Bharti Academy, Varanasi) page no.- 542-544
5. Kaviraj Ambikadutt Shastri, Sushrut Samhita with Ayurved tatva Sandipika Hindi commentary, Susrut Chikitsa sthan 6/4-10, Page no. 27,28 (Choukhambha Sanskrit Sansthan, Varanasi) 2010.
6. Chakradutt with Vaidyaprabha Hindi commentary (Dr. Indradev tripathi)- Arsha Chikitsa- 10, page no. 54 (Choukhambha Sanskrit Bhawan, Varanasi) 2010.
7. Surgery of the Anus Rectum and Colon – john goligher 5th edition, (A.I.T.B.S. Publisher & Distributer) page no. 108
8. Surgery of the Anus Rectum and Colon – john goligher 5th edition, (A.I.T.B.S. Publisher & Distributer) page no. 110
9. Surgery of the Anus Rectum and Colon – john goligher 5th edition,(A.I.T.B.S. Publisher & Distributer) page no. 106

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