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RESEARCH ARTICLE

Role of leech therapy (Jalaukawacharan) in the management of perianal haematoma (Pittaj granthi)

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Abstract

Jalaukawacharan (Leech Therapy) is one among the types of Raktamokshan. Perianal Haematoma is small clot occurring in the perianal subcutaneous connective tissue.

It occurs suddenly and is very painful. In Ayurveda, it can be correlated with Pittaj Granthi. One of the treatments of Pittaj Granthi is Jalaukawacharan. Clinical observation has shown effectiveness of Leech therapy in Perianal Haematoma. A case report of Pittaj Granthi (Perianal Haematoma) was treated successfully by Jalaukawacharan (Leech Therapy) and has been presented here.

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INTRODUCTION

Panchakarma includes five procedures-Vaman, Virechan, Basti, Shirovirechan, and Raktamokshan. Raktamokshan is performed to eliminate the toxins from the blood stream. It is safe, painless and highly effective form of Panchakarma. There are various method of Raktamokshan. Jalaukawacharan (Leech Therapy) is one method of Raktamokshan.

Leeches have been used in medicine since the beginning of human civilization. They have been used to treat a variety of ailments, including nervous system abnormalities, dental problems, and skin disease infection. Today they are mostly used in plastic surgery and other microsurgery^[1] Leech therapy is used for conditions where blood clots or blood pooling is a problem. When people have skin grafts, blood pooling or clotting can decrease tissue healing. Leeches secrete a natural blood thinner that helps to keep blood flowing and improve survival of the tissues.^[2]

Perianal Heamatoma is small clot occurring in the perianal subcutaneous connective tissue, usually superficial to the corrugators cutis ani muscle. The condition is due to back pressure on an anal venule consequent upon straining at stool, coughing or lifting a heavy weight. This condition appears suddenly and is very painful and on examination a tense, tender swelling which resembles a semi ripe black currant is seen. The heamatoma is usually situated in a lateral region of the anal margin.^[3,4]

In Ayurveda, Sushruta, Vaghbata, Sharagdhara, and Vangasen described Pittaj Granthi is a swelling produced by Pitta dosha, which has pains such as burning, very warm, sucking and as being burnt by fire., it is red and slightly yellowish and when pricked exudes warm blood in large quantity,^[5-8] Signs, symptoms, and appearance is same in Pittaj Granthi which occur in perianal region and perianal haematoma. Treatment of Pittaj Granthi is Jalaukawacharan^[9-12] Jalauka dwell in cold, are sweet and born in water, hence it is ideal to remove blood vitiated by Pitta^[13] jalauka indicated for Grathit Rakta (clotted blood)^[14] Method of removing blood from the body using Jalauka is consider as the most easy and convenient. So it was decided to evaluate a role of leech therapy in perianal haematoma.

CASE REPORT

A 55 yr old female was admitted in Panchakarma department of M..A.Podar hospital as indoor patient for *Sandhigatawat* (osteoarthritis) dated on 07/09/15. After 2 days she had complaint of severe pain, discomfort, swelling at perianal region. She had no previous history of such pain. On examination there was small rounded swelling covered with tense stretched skin at the anal orifice at 3 o' clock position. The diagnosis was confirmed as perianal haematoma(*Pittaj Granthi*) and choice of treatment was Leech therapy (*Jalaukawacharan*). Laboratorial investigation like Hb, TLC,DLC,ESR,BSL,CT,BT,HIV,HbsAg were done already and found to be within normal limits.

MATERIALS AND METHODS

Hirudo Medicinalis leech which is indicated for the medical use was applied locally ^[15] i.e. at the perianal haematoma.

Leech Therapy/*Jalaukawacharan* procedure is divided in 3 parts.

1] *Purvakarma*-

1] Purification and Activation of leech was done by putting it in bowl which contain *haridra* (Turmeric) powder and water for 30 min. After this the leech was transferred to another bowl having clean water.

2] Part Preparation

Patient was put in lithotomic position, anus was cleaned by lukewarm water.

2] *Pradhankarma*

The posterior sucker of the leech was held in one hand and anterior sucker was placed at the site of application where leech was expected to be fixed. Thereafter, the posterior sucker was released from the hand which got attached to the surrounding perianal region. It was applied over the most prominent part of swelling. Leech is covered by wet cotton gauze to moist its skin. After 45 minutes of blood sucking, Leech falls off from the site.

3] *Pachatkarma*-

1] The site was cleaned with freshly prepared *Triplala kwatha* and *haridra* powder was applied on bleeding site. Bandage was applied.

2] Induction of emesis to the leech was done by dusting *haridra churna* on its mouth then it was put into *haridra jal* then in pure water^[16] The used leech was kept in a separate jar labeled with details of patient [name, opd / ipd no., Date of application] After 7 days same procedure was done.

OBSERVATION AND RESULTS

Observation and results indicated in Table 1

Day	Date	No of <i>Jalauka</i> used	Amount of blood letting	Pain	Tenderness	Size of perianal haematoma
0	09/09/15	-	-	severe	severe	1cm
1	10/09/15	1	30 ml	no	mild	1/2cm
7	17/09/15	1	25ml	no	no	-

Patient got immediate relief from pain at perianal region. On local examination tenderness reduced and size of perianal haematoma reduced.



Figure 1: Application of leech on perianal hematoma (*Pittaj Granthi*)



Figure 2: Perianal Hematoma (*Pittaj Granthi*) after first *jalaaukawacharan*(date: 10/09/15)



Figure 3: After 2nd *jalauskawacharan* (on 7th day 17/09/15) Size of perianal hematoma completely reduced

DISCUSSION

As patient was indoor patient of panchakarma ward , all routine investigation were done previously. There was no previous history of anal pain, piles or fissure. Acute onset of pain with palpable mass in perianal region is usually due to perianal haematoma. In this case patient had acute onset of severe pain and on examination there was tender 1cm rounded swelling at 3 o' clock position in perianal region. So diagnosis was confirmed as perianal haematoma. *Pittaj Granthi* is round elevated swelling of having severe pain and acute onset, so *pittaj granthi* which occurred in perianal region can be correlated with perianal haematoma. Treatment of *pittaj granthi* is *Jalauskawacharan*. *Pittaj Granthi* is produced predominantly by *pitta dosha* and *jalauka* are *madhur* and *sheeta* in nature which is opposite to *guna* of *pitta dosha*. So *raktamokshan* by *jalauka* is treatment of *pittaj granthi*. *Grathit rakta* means *granthibhuta rakta* i.e. clotted blood. Treatment of *grathit rakta* is *jalauskawacharan* and perianal haematoma is small clot. Leech suck the blood from site of application and reduces the local pressure hence reduces pain and swelling. Leeches suck not only the blood but also leave behind their saliva, which contains enzymes that help to cure the disease. Secretions from the leech salivary gland contain anesthetic, anticoagulant, anti-inflammatory, thrombolytic, vasodilator, bacteriostatic and analgesic substances. Eglins and Bdelins present in the saliva of leech act as anti-inflammatory agents thereby reducing inflammation maintain normal circulation and recover discoloration. Anesthetic agents present in saliva of leech reduce pain, tenderness and give symptomatic relief. Hirudin and calin are anticoagulant agents that effectively inhibit coagulation, destabilase has thrombolytic effect[dissolve fibrin] so leech application was beneficial in this case^[04,17].

CONCLUSION

Leech Therapy is the best therapy in the management of perianal haematoma. It can be concluded that leech application provides relief to the patient of perianal haematoma without any side effect or complication. It can be alternative treatment in the management of perianal haematoma in which surgery is advised.

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