CASE STUDY

AYURVEDIC ENEMA THERAPY IN THE MANAGEMENT OF THROMBOANGITIS OBLITERANS (TAO) - A CASE STUDY

Madan Bhandari1, Prasanna N. Rao2, Gopikrishna B J3 and Suhas Kumar Shetty4

1-4Department of Shalya Tantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka, India

ABSTRACT

Thromboangitis Obliterans (TAO) is a non-atherosclerotic inflammatory disorder of unknown etiology that affects small and medium-sized vessels of the extremities and has a strong association with smoking. The clinical criteria include: age under 45 years; current or recent history of tobacco use; presence of distal-extremity ischemia indicated by claudication, pain at rest, ischemic ulcers or gangrenes and documented by non-invasive vascular testing. A diagnosed case of TAO with gangrene on right great toe with post lumbar sympathectomy status was admitted for severe pain on right lower limb. Ayurvedic enema therapy (Manjisthadi Kshara Basti) for 30 days (Karma Basti) was given for the patient who resulted in significant clinical improvement on the pain and subsequent healing of ulcer. Oil based enema made up Rubia cordifolia (Manjisthadi taila) and kvath (decoction) based enema with manjisthadi kshar basti was executed here on alternate days and had shown significant results on the pain, claudication distance etc.

KEYWORDS

Thromboangitis Obliterans, Manjisthadi Kshara Basti, Karma Basti, Anubhuta Yoga

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INTRODUCTION
Thromboangitis Obliterans (TAO), also known as Buerger’s disease is an inflammatory disorder of vessels where inflammatory endarteritis hampers the proper blood supply. The condition has strong association with tobacco use\textsuperscript{1}. The onset of Buerger’s disease occurs between 40 and 45 years of age, and men are most commonly affected. It begins with ischemia of the distal small vessels of the arms, legs, hands and feet. Involvement of the large arteries is unusual and rarely occurs in the absence of occlusive disease of the small vessels\textsuperscript{2}. In modern medicine, analgesics, vasodilators, anti-platelet aggregators are some choice for conservative management\textsuperscript{3}. Lumbar Sympathectomy can be used for short-term pain relief and to promote ulcer healing in patients with Buerger’s disease but has no long-term benefit\textsuperscript{4}. The symptoms of TAO can be well correlated with Gambhira Vatarakta\textsuperscript{5} in Ayurveda. Alkaline Enema (Kshara Basti)\textsuperscript{6} is explained by Chakradatta and decoction of \textit{Rubia cordifolia} and other ingredients (Manjisthadi Kvath)\textsuperscript{7} is explained by Sarangadhara for Vatarakta. Alkaline enema of \textit{Rubia Cordifolia} and other ingredients (Manjisthadi Kshara Basti) is an Anubhuta Yoga (established through empirical use) and is effective in management of Srotavarodha (blocked channels). Based on the above mentioned views Manjisthadi Kshara Basti was considered for a case of Thromboangitis Obliterans (TAO).

CASE STUDY
A male patient of age 29 years, Coolie by occupation, from Hassan, Karnataka came to an Ayurveda Hospital with the complaint of pain and burning sensation on right lower limb for 4 months associated with an ulcer on right great toe with complete loss of nail bed for 3 months.

\textit{History of Present Illness}
According to the patient he was apparently healthy 4 months back then he gradually developed pain on right calf region. The pain was cramp like, moderate to severe in intensity, initially intermittent in nature and aggravated on exposure to cold and physical activity. Gradually, he developed swelling and reddish discolouration on right great toe associated with blackish discolouration on fore foot. After a week, there was a crack on right toe and the nail was completely peeled off at night leaving an ulcer [Fig:1].

![Fig 1 Before treatment ulcer of the patient](image_url)
History of Past Illness
No History of Hypertension, Diabetes Mellitus, Pulmonary tuberculosis.

Treatment History
For the aforementioned complaints, he visited nearby Medical College where a General Surgeon diagnosed him of Thromboangitis Obliterans (TAO) on Right Lower Limb and advised anti-platelet aggregators and analgesics. As the pain and ulcer was not reduced with the medicines he re-visited the hospital after 2 weeks of treatment. Then he was advised for Right Lumbar Sympathectomy following that.

After Lumbar Sympathectomy, blackish discolouration on the fore foot got reduced but the pain and ulcer remained the same. Later, he was referred to Vascular Surgeon at Bangalore. At Bangalore, the vascular surgeon added some medications and counselled him to be prepared for Below Knee Amputation if the condition remained the same. The patient continuously took the medicines for 2 weeks but the pain was not desirably subsided. As, the patient was not ready for amputation he left the follow-up and came for consultation in our hospital.

Personal History
Appetite – Decreased, Bowel – Regular, Micturition – Normal, Sleep – Disturbed due to pain

Habits: Chronic Smoker for 9 years, 1 pack per day (25 cigarettes per pack), Mixed beedi and cigarette

Examination of Patient
Blood Pressure – 130/80 mm of Hg on supine position, Pulse – 76bpm, regular Pallor-Icterus-Lymphadenopathy-Cyanosis-Clubbing-Oedema-Dehydration} Not present
Respiratory System: Bilateral equal air entry, Normal Vesicular Breath Sound
Per Abdomen: Soft, nontender, no organomegaly
Cardiovascular System: S1S2 sound head, No murmurs
Central Nervous System: Oriented to time, place and person
Local Examination:
-Inspection: An ulcer on right great toe, dry and hard on consistency with nail bed peeled off, loss of hairs [Fig:1]
-Palpation: Right lower limb-Decreased local temperature, Popliteal artery, Posterior Tibial Artery, Anterior Tibial Artery, Dorsalis pedis Artery not palpable
-Gait: Limping gait with Intermittent Claudication, Claudication distance-30 metres

Investigations
Arterial Doppler of Right Lower Limb: Near complete stenosis (>90%) of distal popliteal artery causing significant reduced
flow in posterior tibial artery and distal popliteal artery.

**Diagnosis**

Thromboangitis Obliterans (TAO) with dry gangrene on Right great toe/ S/P Right Lumbar Sympathectomy

**Treatment**

The patient was advised for Ayurvedic Enema for 30 days (Karma Basti) with alternate day only medicated oil enema (Anuvasana Basti of Manjisthadi Taila) and medicinal decoction enema (Niruha Basti) of Manjisthadi Kwatha and other ingredients listed below in table 1:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Latin/English name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>SaindhavaLavana</td>
<td>Rock Salt</td>
<td>5gm</td>
</tr>
<tr>
<td>ManjisthadiTaila</td>
<td>Oil of <em>Rubiacordifolia</em> and other ingredients</td>
<td>60ml</td>
</tr>
<tr>
<td>Madhu</td>
<td>Honey</td>
<td>80 ml</td>
</tr>
<tr>
<td>ManjisthadiKwath</td>
<td>Decoction of <em>Rubiacordifolia</em> and other ingredients</td>
<td>100ml</td>
</tr>
<tr>
<td>Gomutra</td>
<td>Cow’s urine</td>
<td>100 ml</td>
</tr>
<tr>
<td>Kanji</td>
<td>Medicinal rice gruel</td>
<td>100ml</td>
</tr>
</tbody>
</table>

Dressing with Jatyadi taila (Herbal oil, where jasmine is chief ingredient) on the ulcer once daily.

**OBSERVATIONS**

**Table 2 Assessment of BT and AT on different parameters**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Before Treatment</th>
<th>After Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain and Burning sensation on Right lower limb</td>
<td>Visual Analogue Scale- 8 points</td>
<td>Visual Analogue Scale-3 points</td>
</tr>
<tr>
<td>Claudication distance</td>
<td>30 metres</td>
<td>500 metres</td>
</tr>
<tr>
<td>Ulcer</td>
<td>Purulent discharge present</td>
<td>Healed</td>
</tr>
<tr>
<td>Skin Discolouration</td>
<td>Present on the right fore foot</td>
<td>Reduced</td>
</tr>
<tr>
<td>Sleep</td>
<td>Disturbed due to severe pain</td>
<td>Sound Sleep</td>
</tr>
<tr>
<td>Size of ulcer</td>
<td>3x1x0.5 cm with purulent discharge [Fig:1]</td>
<td>Healed completely [Fig:2]</td>
</tr>
</tbody>
</table>

**DISCUSSION**

TAO is one of the most painful vascular diseases. The long term management of it is challenging for the modern surgeons too. In the aforementioned case the patient consulted various General Surgeons and Vascular Surgeons and continuously took the medications that were prescribed for him. He was advised for Right Lumbar Sympathectomy and was operated which was even unable to relieve the pain of patient.

The sign and symptoms of TAO can be well correlated with Gambhira Vatarakta in Ayurveda. In Vatarakta, due to the diet and lifestyle aggravating the Rakta (blood), the Rakta gets vitiated and it does the Avarana (covering) of Vata. VataPrakopa (aggravation) happens and it gets localised.
on different parts of the body manifesting the signs and symptoms of aggravated Vata like pain etc. In Ayurveda, Manjistha (*Rubia cordifolia*) is a renowned Rakta Prasadaka (blood purifier), Tridoshahara (balancing the 3 Doshas) and Srotosodhaka (cleansing the channels). So, use of Manjisthadi Kvath (decoction) and ManjisthadiTaila (oil) purifies the Rakta (blood), pacifies the Vata and makes the proper flow inside the channels (Srotosodhaka). Kshara Basti (Alkaline Enema) has the fast spreading activity which helps to clean the peripheral vascular channels. Hence, the combination Basti is very effective on Peripheral Vascular Diseases like TAO.

**Conclusion**

Thromboangitis obliterans (TAO) is a painful disease of mainly medium sized blood vessels. It is progressive and associated with severe pain according to ischaemic changes. It is directly associated with tobacco smoking.

An endeavour was made to manage a case of TAO with Ayurvedic treatment which was previously advised for Below Knee Amputation. The symptoms of TAO can be well correlated with GambhiraVatarakta in Ayurveda. Ayurvedic Enema (Manjisthadi Kshara Basti) is an Anubhuta Yoga (established by empirical use) showing promising results in TAO. Alkaline Enema (Kshara Basti) is mentioned by Chakradatta and Decoction of *Rubia cordifolia* (Manjisthadi Kvath) is mentioned by Sarangadhara. *Rubia cordifolia* (Manjista) is renowned blood purifier (Raktasodhaka), channel cleansing (Srotosodhaka) and the Alkaline Enema (Kshara Basti) removes the Avarana of Vata (Blocking activity of Vata).

Hence, TAO can be successfully managed by Ayurvedic Enema therapy (Manjisthadi Kshara Basti).
REFERENCES