MANAGEMENT OF A RARE CASE OF PYODERMA GANGRENOSUM THROUGH AYURVEDA – A CASE STUDY

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Abstract: Introduction – Pyoderma gangrenosum (PG) is a rare inflammatory skin disease characterised by tender papules, papulo-pustules or vesicles, progressing into painful and rapidly enlarging ulcers. It can occur at any age, with a highest of incidence between 20–50 years of age. Its treatment is challenging and there is no universally accepted “gold standard” treatment. In Ayurveda this condition can be correlated with Rakta Virana described by Acharya Sushruta in Vrana chikitsa adhavay. Material and Methods - A 38 year old male, visited to Kayachikitsa OPD of Mahatma Gandhi Ayurveda Hospital salod (H), Wardha with the complaints of multiple ulcers over left leg below knee with bleeding and pain since two months. He had a history of its recurrence since 5 years. He was admitted for 15 days and oral as well as local Ayurvedic treatment was given. Result - It showed significant improvement within one month. Discussion – The treatment was planned on the basis of involvement of Dosha(functional units of body), Dhatu(--body tissue) and Srotas(--macro and microchannels of blood). The clinical features indicated Vitiation of Pitta and Kaphadosha, Rasa and Raktaadhatu and Raktaahara strotas(--macro and microchannels of blood). Conclusion - This case study proved that Pyoderma Gangrenosum can be effectively managed with Ayurveda.

Key Words: Ayurvedic medication, Pyoderma gangrenosum, Rakta Virana

INTRODUCTION

Pyoderma gangrenosum (PG) is a rare inflammatory skin disease characterised by tender papules, papulo-pustules or vesicles, progressing into painful and rapidly enlarging ulcers.[1] It has a distressing effect on a patient’s life; pain may alter the eating and sleeping patterns. The tendency of recurrence may trigger anxiety and social isolation.[2] It can occur at any age, with a highest of incidence between 20–50 years of age. It is misdiagnosed in up to 30% of cases.[3,4] The diagnosis of PG is frequently after multiple and unsuccessful treatment attempts, with antibiotics and surgical debridement.[5] Treatment is challenging and there is no universally accepted “gold standard” treatment. Topical and systemic corticosteroids are the first therapeutic option, other immune-suppressors and cytostatics can be used as steroid-sparing agents.[6]

In Ayurveda this condition can be correlated with Rakta Virana described by Acharya Sushruta in Vrana chikitsa adhavay. It is one of the types of NijaVrana. Nijavrana are caused due to intrinsic factors.[7]

Case Report - A 38 years old male, visited in January 2017 to OPD of Kayachikitsa (OPD No.-1701090017) of College Hospital, Wardha with the complaints of multiple ulcers over left leg below knee with bleeding and pain since two months. He had a history of its recurrence since 5 years. Every time he used to take treatment with incomplete ulcer healing.

Previous treatment history included different antibiotics and steroids. At the last, he was diagnosed as Pyoderma Gangrenosum according to its features of frequent painful papulo-pustules and rapidly enlarging ulcers. On examination, multiple ulcers of indefinite size were found. Some new pustules were also seen. Some ulcers had oozing fresh blood which was painful on touch. His CBC and blood sugar were within normal range. According to manifestation of features, He was diagnosed as Rakta Virana because of the features of virana were matching with Rakta virana as follows – it looks like ‘Praval-dal’(Coral pieces) which is covered with ‘krishnasphoipidika’(black eruptive boils).
Table 1. Oral and Topical treatment plan -15 days

<table>
<thead>
<tr>
<th>No.</th>
<th>Medication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abhyantara-chikitsa (Oral Medication)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Kaishorguggul</td>
<td>500 mg twice a day after meal with water</td>
</tr>
<tr>
<td>2</td>
<td>Gandhakrasayan</td>
<td>500 mg twice a day after meal with water</td>
</tr>
<tr>
<td>3</td>
<td>Tab. Septillin</td>
<td>1 tablet thrice a day</td>
</tr>
<tr>
<td>4</td>
<td>Khadirarisha</td>
<td>20 ml twice a day after meal with water</td>
</tr>
<tr>
<td></td>
<td>Bahya-chikitsa (Topical Medication)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>decoction of Triphala &amp; Neempatra</td>
<td>Dhovan (local cleaning) once in the morning</td>
</tr>
<tr>
<td>2</td>
<td>Jatyaditaila</td>
<td>For dressing</td>
</tr>
</tbody>
</table>

Table 2. Oral and Topical Medication continued on discharge (for one month).

<table>
<thead>
<tr>
<th>No.</th>
<th>Medication</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abhyantara-chikitsa (Oral Medication)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Kaishor Guggul</td>
<td>500 mg Twice a day after meal with water</td>
</tr>
<tr>
<td>2</td>
<td>Nisha-Amalaki</td>
<td>1 Tablet Twice a day with water</td>
</tr>
<tr>
<td>3</td>
<td>Mahamanjihadi Quatha</td>
<td>20 ml Twice a day after meal with water</td>
</tr>
<tr>
<td></td>
<td>Bahya-chikitsa (Topical Medication)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Jatyaditaila + Yashadhhasma</td>
<td>For local application Twice a day</td>
</tr>
</tbody>
</table>

Figure 1.

Figure 2.

Figure 3. 5th day of treatment

The *pidika* (boils) are ‘vedanayukta’ (painful) and ‘Raktastravi’ (oozing of blood). In Prakriti assessment, he had most of the characteristics of *Pitta-vataj prakriti*.

On history taking, he was a worker at ‘Bidi’ making company. He was consuming alcohol and non-vegetarian food very frequently (3-4 times a week). He was admitted (IPD No.-1701090005) for 15 days and Ayurveda treatment depicted in Table-1 and Table-2 was prescribed.
DISCUSSION

It was difficult to correlate PG with any of the Kushtha rogas (skin diseases) described in Ayurveda. Most of the features of Rakta Vrana were found in this patient. The treatment was planned on the basis of involvement of Dosha (functional units of body), Dhatu (body tissue) and Strotas (macro and microchannels of blood). The clinical features indicated Vitiation of Pitta and Kapha dosha, RasaRaktaDhatu and Rakta vaha strotas (macro and microchannels of blood).

Kaishore guggul was advised because it contains Shudhda Guggulu, Guduchi, Triphala, Trikatu, Vidanga, Trivrutmool, Dantimool and Goghrita. It is specifically indicated in Vatarakta, Vrana and Kushtha.[8]

It is a perfect combination for Rakta Vrana because Guggul is Shotha shamak (Anti-inflammatory) & Vedanasamak (Analgesic), Triphala has lekhan (scraping of dead tissue) & Ropan (healing) property. Trikatu is Amapachak, Vidanga is Krimighna (Anti-microbial). Trivrutmool and Dantimool are having rechan (purification) property which is helpful to eliminate Pitta and Raktaadhi.

Gandhaka Rasayana was given because it is known to be indicated in all types of Rakta Vikara.[9]

Tablet Septillin is a multi drug combination includes Guggul, Maha-rasnadiKashay, Shankha bhasma, Guduchi, Manjishtha, Amalaki, Shigru, Yashtimadhu having immune-modulatory, antioxidant, anti-inflammatory and antimicrobial properties. It increases the level of antibody-forming cells, thereby elevating the body’s resistance to infection. It is helpful to prevent secondary infection. According to Ayurvedic literature, Khadirarishta is beneficial for curing various skin disorders. All the drugs used in it is Vranaropak (wound healing).[10]

Tablet Nishaamalaki is a combination of Haridra and Amalaki. Amalakiis known for its ulcer healing property.[11] Amalaki is a rich source of vitamin C, which is a potent antioxidant[12].

It is the best amongst the rejuvenating herbs; it is Sandhana karaka (improves cell migration and cell binding) and Kantikara (improves complexion). It helps in fighting many persistent skin diseases[13]. Immunological factors and neutrophil dysfunction are considered to be involved in etiopathogenesis of PG.[14] Curcumin, an active principle of Haridrasis found to be a potent immunosuppressive properties in vitro.[15] It is helpful in preventing immune hyper-responsiveness. Mahamangishkashyapatham was given because of its Raktashodhak (blood purifier) and Vishahar (Detoxifier) property.

For the cleaning of lesions, decoction of Triphala and Neempatra was used; because Triphala is an anti-inflammatory, astringent and Neem is an antiseptic. These were helpful in shedding of the dead tissues. Acharya Sushruta has recommended Triphala for purification of wound.[16]

Jatyaditaaila was used for local application. Jati is Kustaghna (alleviate skin diseases), Vranashodhak (wound cleaning property) and Vranaropak (wound healing property).[17]

Yashad bhasma is having tikta-kashay, sheeta and pitta shamak property. It helps to heal the ulcers. It mainly comprises of zinc which plays an important role in the normal functioning of
skin. Zinc markedly increases the stability of bio-
membranes in general. Ayurvedic literatures
describe the activities of Yashodabhasma as
Kantikara (improves complexion), Rasayana
(rejuvenator) and Grahi (improves moisture
holding capacity of skin). It also improves the
binding power of the cells of soft tissues, improves
cell regeneration and accelerates wound healing.
[18-19] As the patient was consuming the food
which is known to vitiate Pitta and Rakta, he was
advised to stop alcohol and non-vegetarian food.
Patient had completely recovered (Figure-6,7) and
has no recurrence till date (May 16, 2018).

CONCLUSION
Pyoderma gangrenosum is a rare condition
which requires immuno suppressant treatment
in modern medicine. Immuno suppressant has
its own side effects. Ayurveda has very plentiful
herbs, spices and medicinal plants. Many of
them has proved to be have Rasayana (immuno-
modulator), Vrana shodhak and Vranaropak
(Wound cleaning and healing properties). This
case study revealed that Ayurveda has effective
management for Pyoderma gangrenosum.

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