ROLE OF LEECH THERAPY IN ALOPECIA BARBAE – A SINGLE CASE STUDY

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Abstract  Alopecia Barbae is defined as patches of hair loss in beard. It is an autoimmune disease, which affects the hair follicles of beard. The treatment available is usually corticosteroids but it has limited role in its recovery and has lot of side effects. Keeping this in view, leeching was done on a patient with alopecia barbae with one year duration of the disease. For this purpose, 1 to 2 fresh leeches were applied on the affected areas of the beard for 45 minutes on every 15 days for 2 months with post leeching follow-up for six months.

The results of the study showed significant visible effects in the form of follicular presence and hair growth. The details have been given in the study report.

Key Words: leeching; alopecia barbae; autoimmune

I. INTRODUCTION
Alopecia means loss of hair or baldness. There are different causes and pattern of alopecia. Alopecia areata is a condition in which there is loss of hair in patches. A small patch of hair loss in beard area is called alopecia barbae. It is a type of alopecia areata. Alopecia Barbae can develop at any age in men after puberty. However it is often observed between 30-40 years of age. It is not common, 2% of men suffer from hair loss in sporadic areas of beard. It is characterized by small circular spots of facial hair loss often adjacent to one another or even at a distance. The skin of the patch is smooth and shiny. In the beginning, the area is small but as time passes it may increase in size. There may be occasional burning and tingling sensation in the area. The cause of alopecia barbae still remains inconclusive. However lot of studies indicate it is an autoimmune problem where the immune system mistakenly attacks healthy human tissue. Hair follicles are targeted the roots of hair becomes inflamed and hair falls out. Alopecia barbae is believed to have a strong family history. Emotional upset, mental stress, environmental situations, and depression are some of the triggering factors responsible for the disease. Alopecia barbae is not fatal but becomes a cosmetic problem for men.

There have been several treatments for Alopecia Barbae like, Intralesional Corticosteroids, Systemic Corticosteroids, Minoxidil, Dithranol but they have a lot of side effects like obesity, hypertension, skin thinning and these patients complaint of spontaneous remissions after stopping the treatment [7-15].

Leeching (Hirudotherapy) is one of the most important and widely practiced method of regimental therapy used since long [18]. Modern study of leech therapy has also shown significant results in many diseases. Surgeons uses the leech therapy in plastic and reconstructive surgery and for the treatment of postoperative venous congestion and graft rejections[19]. Leeches contain more than 100 pharmacologically and biologically active enzymes having different actions like analgesic, vasodilatation, anti thrombotic action.

II. MATERIALS AND METHODS
A male patient, 35 years of age, with disease of one year duration was registered for the study. The diagnosis was also done clinically as a circular patchy loss of hair on the right side of cheek near chin.

Before starting the therapy, the routine pathological and biochemical investigations including BT and CT were performed to exclude any bleeding disorder. Fresh leeches were procured and were then identified by zoologist. Then under aseptic procedures, 1 to 2 fresh leeches were applied on the affected areas of the beard till leeches were belly filled and fell down of there own (approximately 45 minutes).

Then antiseptic dressing was applied on the site. This leech therapy was done every after 15 days for two months. The patient was examined for the presence of hair follicles and growth of hair over affected areas. Assessment Criteria: Assessment was done by digital photography and clinically by the presence of hair on the affected site of the beard. Digital photography was done on every follow up to assess the results.

RESULTS AND DISCUSSION:
Alopecia barbae is definitely on rise and is the second commonest site after scalp. Fig. 1 depicts the patch on the beard area, Fig 2 shows the application of leech on the affected site at the entry level. After the first follow up no improvement was seen which is evident in fig. 3, this fig. showed the area after complete trimming of the beard. On second follow up some improvement was clinically assessed by the presence of some hair follicles on the affected site. After the third and fourth follow up of leeching complete growth of hair can be seen on the affected area of beard which is depicted in fig. 4 and 5. The post treatment follow ups shows no remission for further six months. The complete growth of hair can assumed to the bioactive substances, coagulation inhibitors, vasodilators, platelet aggregation inhibitors, anti-inflammatory, antimicrobial, platelet activating factors, proteinase inhibitors, hirustasin, hyaluronidase, steroids and anaestheticizing agents.
CONCLUSION

Leech therapy has a long history, going from popular and well accepted to falling out of favor and being thought of as an unscientific home remedy, to coming back into current medical practice with strong scientific support. Compared to other techniques of complementary and natural therapy, Leeching can be learned relatively quickly and can reduce the complications arising from the excessive use of synthetic drugs. Leeches are used when venous outflow cannot match the arterial inflow, therefore leeches are used to salvage compromised microvascular free-tissue transfer.

The result of this case study has shown that leeching has a potential for treating Alopecia barbae, as the research patient showed hundred percent improvement.

REFERENCES


