LEECH THERAPY IN ALOPECIA AREATA – A SINGLE CASE REPORT

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ABSTRACT

Alopecia Aerata is an autoimmune disease, which affects the hair follicles, where hair is lost from some or all areas of the body, usually from the scalp. The treatment available is usually corticosteroids but it has limited in its recovery. In view of this, the Unani Classical Regimental Therapy, i.e. leeching was done on a patient with alopecia areata with one year duration of the disease. For this purpose, 1 to 2 fresh leeches were applied on the affected areas of the scalp for 30 minutes after every twenty days for duration of two months with post leeching follow ups for four months.

The results of the study showed significant visible effects in the form of hair growth.

Key words: Leeching, alopecia areata, autoimmune, humors, hirudo medicinalis

INTRODUCTION

Alopecia is derived from Greek word “Alepekia” which means a disease in which the hair falls out. There are different types of alopecia which include Alopecia adnata, cicatris, conginitalis, disseminate, leprotica, marginalis, medicamentosa, mucinosa, pityrodes, presinilis, senilis, symptomatic, syphilitica, totalis, toxica, triangularis, triangularis, congenitalis, and Alopecia universalis. Alopecia areata is a condition in which hair is lost from some or all areas of body usually from the scalp. It is the most frequent cause of inflammation induced hair loss affecting 4.5 million people in USA. The prevalence is 0.1- 0.2%. Alopecia areata is manifested as loss of hair in well circumscribed patches of normal appearing skin most commonly on scalp and in regions of beard. It is an autoimmune disease. Thinning of hair usually begins between 12 and 40 years old in males and females. Approximately half the population expresses this trait to
some degree before age 50. Inheritance is polygenic. About 20% of people with alopecia areata have a family history of the disease, indicating a genetic predisposition. Associations have been reported with a variety of genes, including major histocompatibility complex, cytokine and immunoglobulin genes, suggesting that the genetic predisposition is multifactorial in nature. The hair follicle lesion is probably mediated by T lymphocytes. Autoimmune hair loss (alopecia areata) transferred by T lymphocytes to human scalp explants on SCID mice. There have been several treatments for Alopecia areata like with Contact Immunotherapy, Intralesional Corticosteroids, Systemic Corticosteroids, Photo chemotherapy, Minoxidil, Dithranol. These treatments can induce hair growth in alopecia areata but none has been shown to alter the course of the disease. The high rate of spontaneous remission makes it difficult to assess efficacy, particularly in mild forms of the disease. Some trials have been limited to patients with severe alopecia areata where spontaneous remission is unlikely. However, these patients tend to be resistant to all forms of treatment and the failure of a treatment in this setting does not exclude efficacy in mild alopecia areata. Few treatments have been subjected to randomized controlled trials and, except for contact immunotherapy, there are few published data on long-term outcomes. Spontaneous remission occurs in up to 80% of patients with limited patchy hair loss of short duration (<1 year).

Unani (Greek) system of medicine is based on the concept of balancing body humors. Four main methods are described to treat the disease as per Unani classical text books, these are pharmacotherapy, regimental therapy, dietotherapy and surgery. The management of the disease is mainly done by pharmacotherapy and regimental therapy. In regimental therapy, the method like taaleeq (leech therapy) has been suggested by many unani scholars in the patients of alopecia areata.

Leeching (Hirudo medicinalis) is one of the most important and widely practiced methods of regimental therapy used for local evacuation of morbid humours. Modern study of leech therapy began in the 1960s, when medicinal leech therapy achieved an international comeback, initially because of the spectacular results in plastic and reconstructive surgery for the treatment of postoperative venous congestion and graft rejections. FDA has approved the use of leeches as medicine in 1980. A simple principle lies at the heart of all hirudo-miracles i.e During the process of feeding, leeches secrete a complex mixture of different biologically and pharmacologically active substances into the wound which is potent in analgesic, anti-inflammatory, anticoagulants, steroids, histamine and serotonin.

CASE REPORT

A male patient of 32 years age with clinically diagnosed alopecia areata. The patient has the history of two spots of patchy loss of hair since 1 year. The patient gives the history of treatment by allopathic medicine for six months, but there was no improvement and then the patient was without any treatment for about next six months duration after he stopped the medication. The same patient was registered at RRIUM Srinagar on 27-7-2013 for the study. Before starting the leech therapy, the routine pathological and biochemical investigations including BT and CT were performed. The part were leech to be applied were cleaned.
properly to remove any dirt or odour. Under all aseptic conditions, 1 to 2 fresh leeches were applied on the affected areas of the spot. The leeches were allowed to suck till it detaches itself. After that, Antiseptic dressing was applied on the part. Three stings of leeching were given to the patient after every twenty days from 31.07.2013 to 30.09.2013. Digital scalp photography was used to access the response. The hair started growing soon after second sting of the leeching and after third sting of the leeching the hair growth shows significant improvement with complete growth of hair at affected patch at the end of third month. After the leech therapy the patient was monitored for six months but there was no recurrence.

Figure 1. Patient before leeching.
Figure 2. Leeching.

Figure 3. Patient after leeching.
DISCUSSION

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

CONCLUSION

Though Leech therapy proved very beneficial in case of Alopecia Areata. Leech therapy has shown speedy, cost effective management of this problem and will thus discourage the risk of recurrence in these patients.
It is proposed that the leech therapy may be introduced for large sample, so that its effect may be interpreted more authentically. Clinical trials using appropriate end points need to be conducted. As the disease is quite alarming, special centres need to be established worldwide.

CONSENT

Written informed consent was obtained from the patient for publication of this case report.

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COMPETING INTERESTS

The authors declare for no competing interest.

REFERENCES

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