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Case Report

Alopecia Totalis in young siblings: An intriguing case

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Abstract Two young brothers aged 7 and 10 with recurrent alopecia totalis were successfully treated medically and emotionally with constant motivation, empathy and support along with short term use of steroids.

Key words
Alopecia totalis, recurrent, minoxidil, psychosocial distress.

Introduction

Alopecia totalis is a non-scarring form of alopecia which is both distressing and disappointing for adults, but more so for children as they have to bear the brunt of peers, undergo lengthy and cumbersome treatment, face disappointment as the results may be fruitful and recurrence is common. Alopecia totalis is a condition characterized by the complete loss of hair on the scalp as well as eyebrow hair, and eye lashes may also be lost. It is an autoimmune disease. Approximately 20% of effected patients have positive family history.

Case report

Two young males aged 7 and 10, with glum and fearful eyes, were diagnosed in my clinic with alopecia totalis. Born out of non-consanguineous marriage, full term without fetal anomalies, they started to lose hair nearly 3-4 years prior to consulting me. On naked eye examination, the younger boy appeared with complete loss of scalp hair, eyebrow hair, and very sparse eyelashes. On close examination, he had a few streaks of light brown coloured scalp hair. The hair was very thin, but not easy to pluck. The scalp was smooth and soft. Similarly, the elder boy had a similar appearance albeit his patches of preserved hair were comparatively dense. Each patch was around 3-4 inches long on the area above the ears bilaterally. However, he had good growth of eyebrow and eyelash hair. No scarring or exclamation mark hair could be seen. No nail pitting, no sign of fungal disease, or atopy were present. On gross physical examination, both seemed well-fed and had achieved normal milestones.[1] Blood complete picture, thyroid function test, autoimmune thyroid profile, random blood sugar was normal. Biopsy was not done due to the patients' father's refusal. Family history had no similar occurrences. Their other brother aged 5 was normal. In regard to drug history, they had been seeing doctors for the last three years for the same reason. They were given ¼% dithranol in 50 gram Vaseline, 1% mometasone furoate, multivitamins containing zinc and lysine and a nutritional shampoo. They started to grow hair, but unfortunately lost it within one month. Another trail of fluocinolone with olive oil was tried alongside 120mg/5ml clarithromycin was given for one month. This was followed by Minoxin 4 %, depomedrol 20mg intramuscular monthly and procapil 2.5%. Only one session of PRP was done, as the young patients could not tolerate it. The patients came across to me as

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very distressed and disappointed. I had a very long discussion with the patients, involving the parents when and where required. The young patients needed support, encouragement, hope, and empathy along with medicines. Third line treatment option was precluded as the children had a strong fear of needles and the family refused cyclosporine and PRP.[2,6,7] The boys were given 4 % minoxin, syrup prednisolone 15mg/5ml with a tapering dose every 1 week, clobetasol propionate topically once a day, multi-vitamin syrup, and kenacort injection ½cc 1/intra-muscular monthly for three months.[5] They were called for follow ups. After one and a half months, new hair growth on the lateral side of the scalp region was noted. The most important factor to be noted was the confidence and bright outlook towards the disease by the children. They followed up after every 2-3 months. Clobetasol propionate was substituted after two months by fluticasone propionate and carried on for six months.[8] Minoxin 4% and multi vitamin syrup was continued till both of them developed a thick fluff of hair akin to a wig. Eyebrow hair and eye lashes grew alongside the scalp hair. The progressive hair growth continued till the scalp was full. They had regular follow-ups every 3 months and in each follow-up, the session was interactive and candid emphasizing on their morale and giving them hope yet preparing them for the recurrence of the disease.

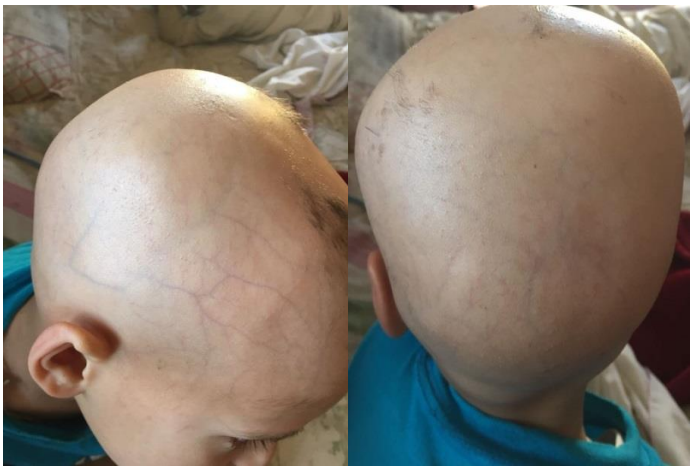

Figure 1 Younger patient before treatment

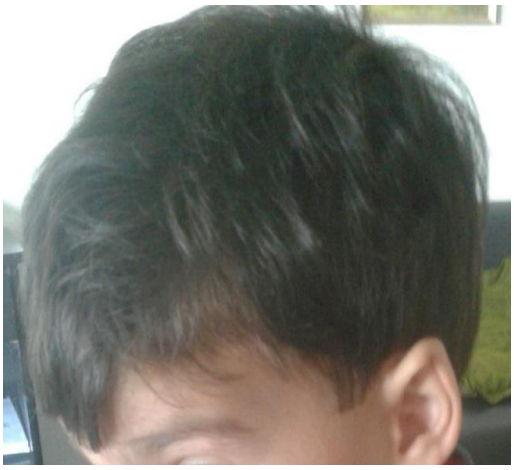

Figure 2 Younger patient after treatment

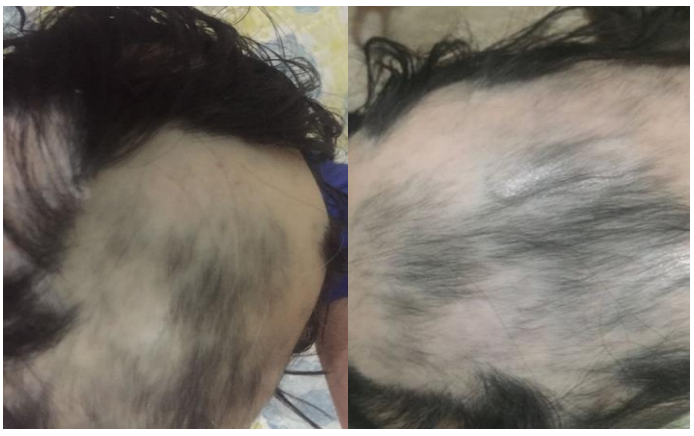

Figure 3 Elder patient before treatment

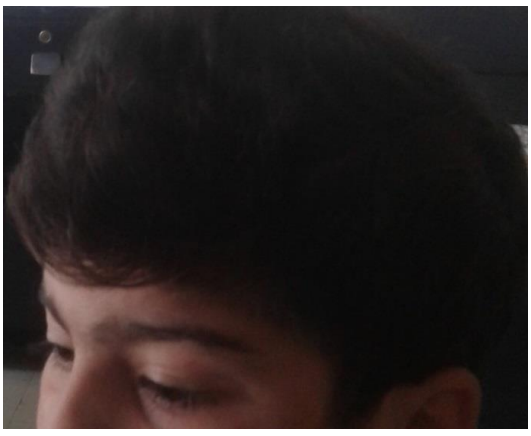

Figure 4 Elder patient after treatment

Discussion

Alopecia totalis is an autoimmune recurrent, non-scarring type of hair loss which can affect any hair bearing area and may manifest itself in many different patterns. Although it is a benign condition and most patients are asymptomatic, it can be a source of great emotional and psychosocial distress.[3,4] The exact pathophysiology of alopecia areata remains unknown, but the most widely accepted hypothesis is that alopecia areata is a T-cell mediated autoimmune condition that is most likely to occur in genetically predisposed individuals. Recent genetic studies have identified numerous susceptibility genes for alopecia areata, including immune and hair follicle related genes. In most reports, the family history is positive for 20% of the cases and there are several case reports for alopecia areata in twins.

My inference in this case is that alopecia areata in children needs to be treated both medically, as well as emotionally, with emphasis on psychological well-being by the treating dermatologist and psychologist if necessary. Patients need constant support, empathy, and motivation. Another highlight is the undue prejudice to the use of steroids. If used short-term and judiciously, it is very much beneficial.

References

1. Menon R, Kiran C M. Concomitant presentation of alopecia areata in siblings: A rare occurance. Int J Trichol 2012; 4(2): 86-88.
2. Adel Alastani. alopeciaareata: a new treatment plan: Clinical, cosmetic and investigational dermatology 2011; 4: 107-115.
3. Danny Wolf, Ronni Wolf. Simultaneous alopecia areata in two siblings. J Am Acad Dermatol 1984: 5: 897-898.
4. Kakourout, K Karachristou, G Chrousos. Alopecia areata in children: Impact of personal and family stress and autoimmunity. J Eur Acad Dermatol 2007; 21: 356-359
5. JimyungSeo, Young In Lin, Shinwon Hwang et al. Intramuscular tramcinoloneacetonide: An undervalued option for refractory alopecia areata. The J dermatol 2017; 44(2): 173-179.
6. Deborah Lee, Doo Jin Oh, Jin Won Kim et al. Treatment of severe alopecia areata: Combination therapy using systemic cyclosporin along with low dose corticosteroids. Ann Dermatol 2008; 20(4): 72-178.
7. A Trink, E Sorbellin, P Bezzola et al. A randomized, double–blind, placebo and active controlled half head study to evaluate the effects of PRP on alopecia areata. Brit J dermatol 2013; 169: 690-694.
8. Leonie HA Broersen, Alberto M Pereira, Jens Otto, L Jorgensen et al. Adrenal insufficiency in corticosteroids use: Systemic review and meta analysis. J Clin Endo Met 2015; 100(6): 2171-80.