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## INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/20190

DOI URL: <http://dx.doi.org/10.21474/IJAR01/20190>



### RESEARCH ARTICLE

#### ALOPECIA UNIVERSALIS IN ULCERATIVE COLITIS

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#### Manuscript Info

##### Manuscript History

Received: 06 November 2024

Final Accepted: 10 December 2024

Published: January 2025

##### Key words:-

Ulcerative Colitis, Crohn's Disease,  
Alopecia Universalis, Sulfasalazine,  
Azathioprine

#### Abstract

**Introduction**-Inflammatory bowel disease (IBD) comprises of predominantly ulcerative colitis followed by Crohn's disease in India. They affect predominantly gastro-intestinal area but extra-intestinal involvement also occurs which include skin also, symptoms of which can start before, simultaneously or later in the course of IBD.

**Case Report**-The present case report is of a 30-year young male with history of six months alopecia universalis and a history of intermittent diarrhea associated with blood for three years. His Colonoscopy and biopsy on histopathological examination confirmed ulcerative colitis. Patient was on mesalamine, steroids and azathioprine. On follow up, there was no regrowth of hair.

**Conclusion**-Thus, clinicians should recognize that various skin manifestations, including alopecia, may be an extra-intestinal presentation of IBD, particularly ulcerative colitis (U.C.).

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#### Introduction:-

The inflammatory bowel disease (IBD) has different prevalence rate depending on geographic regions. The maximum prevalence and incidence are seen in Europe i.e. ulcerative colitis (UC) 505 per 100,000 populations and for Crohn's disease (CD) 322 per 100,000 populations whereas annual incidence rate varies between 0.6 to 24.3 per 100,000 and in Asia and Middle East 0.1 to 6.3 per 100,000[1]. The IBD not only affects intestine but have extraintestinal manifestations also, to the tune of 21% to 41% [2] and in the dermatological presentations are most variable can mark the beginning of the disease in few patients. In past, it was thought that hair loss was less prevalent [3] but later study [4] showed that frequency of hair loss in two hundred and ten patients with IBD was thirty three percent. The hair loss associated with IBD is of three varieties i.e. telogen effluvium, alopecia areata (AA) and primary cicatricial alopecia (PCA) which has already been documented in the literature [5] which showed association of it in twelve patients of IBD.

#### Case Report

A 30-year-old male, employed in a private sector job presented with progressively worsening hair loss on the scalp, eye brows, eye lashes and from other parts of body, over the past six months. It started by the falling of the hairs on scalp which later became diffuse and involved whole body. On evaluation, he reported a three-year history of intermittent diarrhoea with blood and tenesmus. He was non-smoker and non-alcoholic and had not used any medicines. He was married for last five years and had one issue. There was no family history of diarrhoeal illness. On general assessment, he was moderately built with generalized alopecia with no hairs on body i.e. scalp, eye brows, eye lashes, chest, upper and lower limbs and pubic area. He used to wear cap to hide his alopecia. The rest of systemic examination was essentially normal. The colonoscopy revealed features of pancolitis and on

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histopathological examination confirmed it to be ulcerative colitis (UC). The peripheral blood film showed mild leucocytosis and raised erythrocyte sedimentation rate. The viral screen and auto-immune profile was non-contributory. The patient was on oral sulfasalazine 1 gm twice daily, azathioprine 100mg/day, wysolone 30 mg/day, multivitamins including folic acid and calcium supplementation.



**Figure 1:-** Loss of hairs on scalp and eye brows.

**Figure 2:-** Complete loss of scalp hairs.

### Discussion:-

Our case report of a young male who developed alopecia areata in combination with IBD has highlighted the need of health care practitioners to be vigilant not only for typical manifestations but also peculiar one like alopecia being extra-intestinal manifestation in our present case and gave a lead for work up and diagnosis of ulcerative colitis. The patient's baldness and body hair loss led him to seek medical advice due to cosmetic reasons. One study [3], reviewed eleven case reports regarding association of alopecia areata (AA) with IBD and out of them majority had developed other autoimmune diseases. Occasionally, the activity of IBD is quiescent at the time of hair loss. The regrowth of hair after azathioprine prescription is reported only in two cases with CD [6,7]. The beneficial effect of azathioprine in IBD with AA [6] led to improved hair growth. The AA and UC cases have a co-associated autoimmune condition such as vitiligo, autoimmune thyroiditis, myasthenia gravis and scleroderma [8,9,10,11]. In another study conducted to see association between seventy patients of AA, showed occurrence of thyroid disorder (18.3%), Diabetes Mellitus (7.1%), allergic rhinitis and bronchial asthma (4.2%), ulcerative colitis (2.8%) and Systemic lupus erythematosus (1.4%) [12]. Patients with UC may develop alopecia areata (AA) simultaneously, before or after the onset of IBD as both of them have genetic susceptibility and their autoimmune pathogenic processes.

### Conflict Of Interest

None and no financial support taken and proper consent was taken from the patient.

### Limitation Of Study & Future Considerations

There is lack of long-term follow-up data on hair growth and unavailability of trichoscopy or scalp biopsy to confirm hair loss subtype. More researches are required in future for studying alopecia in IBD patients.

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