

## **RESEARCH ARTICLE**

## ALBENDAZOLE INDUCED ANAGEN EFFLUVIUM- A CASE REPORT

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# Manuscript Info

### Abstract

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*Key words:-*Anagen Effluvium, Albendazole, Trichogram Anagen effluvium is the abrupt loss of hair that are intheirgrowing phase (anagen) due to an event that impairsthe mitotic or metabolic activity of hair follicle. We are reporting a femalepatient presenting with sudden onset of hairfall since one week. She has history of usage ofalbendazole 400mgtwice in a day for 2months forhydatid cystin liver.No history of any otherrisk factors for acute, severe hairfall.On examination, diffuse thinning of hairwithout scarringwas noted over scalp. Trichogramshowsdystrophic anagen hairs, confirmingthe diagnosis ofanagen effluvium.

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#### Introduction:-

Anagen effluviumis anonscarringalopeciaof suddenonset. Although anagen effluvium is commonly associated with chemotherapy and radiation to the head and neck, other causes of anagen effluvium are: severe proteinenergy malnutrition, pemphigus vulgaris, and alopecia areata. Other medications that can rarely cause anagen effluviuminclude bismuth, levodopa, colchicine, cyclosporin, anticoagulants and antiparasitic drugs like albendazole<sup>3</sup>. Albendazole causes severe alopecia with preferential sparing of the occipital scalpand premature abrupt termination of anagen leading to shedding of dystrophic or brokenhairs.<sup>4</sup>

#### **Case Report**

A 50 year old female patientcame withchiefcomplaint ofsudden onset of diffusehairfall since one week. Amount ofhairfall was twohandfuls since 4days.History of usage of albendazole400mg twice a day since 2months for hydatidcyst inliver. No history of any physical or psychological stress factors. No history of exposure radiation orchemotherapy orintake of anyother drugs causing anageneffluvium.Nohistoryof any systemic diseases like systemic lupus erythematosus or secondary syphilis[causes of peribulbar inflammation]. On examination, there is diffused crease in the density of hair over scalp without erythema, scaling, atrophy or scarring. Hairpulltest was positive.Laboratory testslike serum iron, ferritin, vitaminB12, thyroid profilewere normal. Trichoscopyshowshoneycomb pattern with variable hair density. Trichogramshowsdystrophic anagen hairs.

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Figure 1:- Patient With Hair Lost In A Span Of One Week.



Figure 2:- Honeycomb Pattern On Trichoscopy.

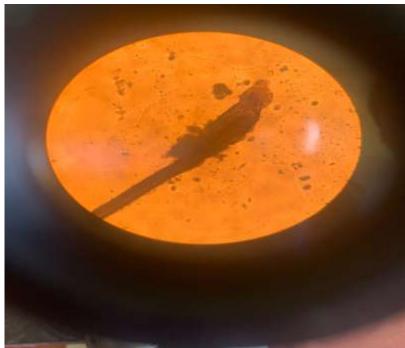


Figure 3:- Anagen Hair On Trichogram.

## **Discussion:-**

Albendazole is a benzimidazole derivative used in the treatment of hydatid cysts and other parasitoses. The mostcommon side effects of albendazole are abdominal pain, nausea, vomiting and elevated liver enzymes. Rare sideeffects are alopecia and cytopenias, reversible on stopping the drug. The primary mechanism in alopecia and cytopenias of finite control binding  $\beta$ -tubulin<sup>2</sup>. Drug induced hairfall might be one of the most important causes of acute and severe hairfall. Soone must not only rule out the most common causes like chemotherapy, should also ut the history of intake of raredrugs causing an agen effluvium likelevodopa, anticoagulants, cyclosporine, albendazole, colchicine. Henceforth weare reporting this case of an agen effluvium as arare side effect of albendazole.

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