## **Case Report**

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# Resolving persistent itching and allergic issues in the ear, eye and shoulders over time through effective dandruff treatment

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#### **ABSTRACT**

The outlined case study describes the experience and resolution of persistent health issues itching and allergic reactions in the ear, eye and shoulders which continued for an extended period. Initially, the patient consulted an ENT specialist, followed by an ophthalmologist, yet obtained no relief. After several months of suffering, the patient independently identified dandruff as the potential underlying cause. Remarkably, symptoms were entirely alleviated upon using a medically recommended anti-dandruff shampoo. This case emphasizes the importance of identifying and correlating ENT and dermatological health concerns.

**Keywords:** Allergic reactions, Case study, Dandruff, Dermatological conditions, Itching, Medicinal shampoo, Symptom resolution

#### INTRODUCTION

Persistent itching and allergic reactions in the ear, eye and shoulder regions can significantly impair quality of life, often necessitating consultations with various specialists such as ENT physicians, ophthalmologists or dermatologists. Misdiagnosis or incomplete diagnosis may result in prolonged patient discomfort. This case study emphasizes the importance of considering dermatological causes when addressing ENT-related symptoms.

In dermatology, seemingly unrelated symptoms often share a common etiology. For example, dandruff a common scalp condition associated with Malassezia yeast can extend its effects beyond the scalp, impacting areas such as the ears and eyebrows through inflammatory responses and skin irritation.<sup>1</sup>

Dandruff is often dismissed as a minor concern, yet it may lead to significant discomfort and secondary symptoms when overlooked or improperly treated. It is considered a chronic inflammatory condition primarily affecting the scalp and often seen on oily skin surfaces, where microbial colonization may exacerbate irritation and itching.<sup>2</sup>

This report outlines a patient's self-discovery of dandruff as the root cause of widespread symptoms initially treated by ENT and ophthalmology specialists without success. The successful use of a medicated shampoo resulted in full symptom resolution, emphasizing the necessity of integrative diagnostic approaches and greater awareness among healthcare professionals regarding atypical manifestations of dermatological conditions.<sup>3</sup>

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#### **CASE REPORT**

Six months before full recovery, the patient visited an otolaryngologist due to persistent itching in both ears (Figure 1). A topical cream was prescribed and used as directed but failed to provide relief.

Subsequently, the patient experienced severe eye itching and visited an ophthalmologist. After examinations, the physician prescribed corrective lenses and lubricating eye drops (Figure 2). Despite regular use, symptoms persisted.

The patient's condition worsened over time, manifesting as allergic reactions and itching in the neck, shoulders, back and lower abdomen (Figure 3). A topical corticosteroid cream (Dermasol) was prescribed but was also ineffective.

Eventually, the patient noticed fine dandruff flakes falling onto the affected areas and suspected a correlation between dandruff and the persistent symptoms. Initiating self-treatment with a medicated anti-dandruff shampoo, applied every other day for three weeks, resulted in complete symptom resolution.<sup>5</sup>

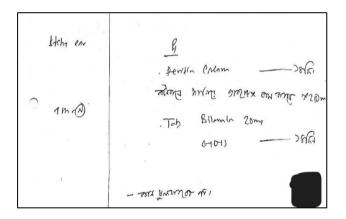


Figure 1: Visiting of ENT specialist and prescribed medication for ears itching.

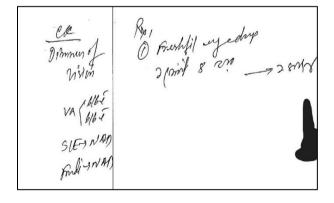


Figure 2: Visiting of ophthalmologists and prescribed medication for eye itching.



Figure 3: Skin rash before the treatment with antidandruff shampoo.

Consistent application of the anti-dandruff shampoo successfully eradicated dandruff. Simultaneously, all related symptoms itching and allergic reactions in the ears, eyes, shoulders, lower abdomen and other affected areas disappeared (Figure 4).<sup>5</sup>



Figure 4: Resolution of skin rash after 21 days of treatment with antidandruff shampoo.

#### **DISCUSSION**

This case highlights the need to consider dermatological causes, such as dandruff, in the differential diagnosis of persistent ENT and ophthalmic symptoms.

Dandruff, linked primarily to Malassezia yeast, can cause secondary symptoms in areas beyond the scalp.<sup>6</sup> This patient experienced itching in non-scalp areas despite medical consultations and treatments, underlining the diagnostic oversight that can occur when dermatological evaluations are excluded.

Comprehensive approaches that include dermatological assessments are essential in patients with unexplained allergic or pruritic symptoms. This case supports prior studies showing that seborrheic dermatitis and dandruff can have systemic manifestations. 8

Additionally, patient self-awareness played a critical role. The ability of the patient to deduce the underlying issue illustrates the significance of patient engagement and advocacy in the healthcare process.

Emerging evidence from microbiome research suggests that skin conditions like dandruff are associated with altered microbial communities, further supporting the complexity and systemic nature of dermatological disorders.<sup>9</sup>

Topical treatments such as azelaic acid, herbal formulations and anti-inflammatory shampoos have shown promising results in managing dandruff and related symptoms. <sup>10</sup>

#### **CONCLUSION**

This case underscores several critical lessons for clinical practice. Persistent and unexplained symptoms in nonscalp regions should prompt evaluation of dermatological causes such as dandruff. Dermatological conditions may manifest in atypical locations, necessitating comprehensive, integrative diagnostic strategies. Patient insight and self-advocacy are invaluable tools in uncovering overlooked etiologies and guiding effective treatment. Further studies are recommended to explore the systemic manifestations of common dermatological conditions and develop more holistic diagnostic frameworks.

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