

## **Case Report**

### **A Case of Minocycline Induced Buccal Mucosa Hyper pigmentation**

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**Abstract:** We present a patient exposed to minocycline for 3 years for treatment of rosacea, presenting with disfiguring buccal mucosa hyper pigmentation. Discontinuation of the minocycline resulted in dramatic improvement documented in the serial images.

**Keywords:** Minocycline, rosacea.

#### **INTRODUCTION**

Minocycline is semi-synthetic tetracycline antibiotic that commonly used to treat acne and rosacea. Hyper pigmentation is well-documented side effect of minocycline small proportion of patients particularly in those with prolonged use. It can affect various body site including skin and less commonly oral mucosa.

#### **CASE REPORT**

A 56-year-old female with Crohn's disease in remission and rosacea, presented with post-surgical intra-abdominal infection, following surgical treatment for intestinal obstruction, for which she was on treatment with intravenous piperacillin-tazobactam. Physical examination revealed buccal mucosa hyper pigmentation without skin involvement (figure-1). She stated that the buccal mucosa hyper pigmentation has been bothering her for two years and is disfiguring. The patient has been on minocycline for rosacea treatment for the last 3 years. She was informed that her oral hyper pigmentation is most likely minocycline induced and she was advised to discontinue it. One year after discontinuing minocycline, the buccal mucosa hyper pigmentation has almost resolved (figure-2).



**Fig-1: Buccal mucosa hyper pigmentation that was observed initially.**



**Fig-2: One year after discontinuing minocycline, the buccal mucosa hyper pigmentation has almost resolved**

#### REFERENCES

1. Eisen, D., & Hakim, M. D. (1998). Minocycline-induced pigmentation. *Drug Safety*, 18(6), 431-440.
2. Treister, N. S., Magalnick, D., & Woo, S. B. (2004). Oral mucosal pigmentation secondary to minocycline therapy: report of two cases and a review of the literature. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*, 97(6), 718-725.

#### DISCUSSION

Minocycline is a semi-synthetic tetracycline antibiotic that was introduced in 1967. Hyper pigmentation is well-documented side effect of all Tetracycline's with the exception of doxycycline (1). Minocycline has the highest likelihood of causing hyper pigmentation in the tetracycline antibiotic (2). Minocycline induced hyper pigmentation (MIH) develops in a number of body areas including skin, nails, eyes, bone and cartilage, buccal mucosa and internal organs. Minocycline is the only tetracycline associated with development of buccal mucosa pigmentation for unknown cause [1, 2].

Unlike cutaneous MIH, development of MIH of oral mucosa has been rare and can affect buccal mucosa, gingiva, lips and tongue. Although typically MIH occur with longer duration use of minocycline, oral mucosa doesn't appear to be related to either the duration or dose of minocycline and it resolves when the drug stopped as described in our case report [1, 2].

#### CONCLUSION

MIH is a benign condition and largely reversible, however we recommend routine skin and mucosal surface examination for patient on prolonged minocycline use to avoid MIH to cause disfiguring buccal mucosa hyper pigmentation.