Rare Case of Etoricoxib-Induced Oral Ulceration

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Abstract

Etoricoxib is a highly selective cyclooxygenase 2 (COX-2) inhibitor used to treat chronic pain in osteoarthritis and rheumatoid arthritis, and acute pain in some jurisdictions. The adverse effects of COX-2 inhibitor are less than those of the normally used conventional non-steroidal anti-inflammatory drugs (NSAIDs), and only a small number of adverse oral reactions have been previously reported. This report presents a case of a 36-year-old woman who had etoricoxib-induced extensive oral ulceration. The clinicians should be aware of the unwanted side effect of etoricoxib as well as the other COX-2 inhibitors that can cause oral ulcer even though it rarely occurs.

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Introduction

Etoricoxib is a highly selective cyclooxygenase 2 (COX-2) inhibitor indicated for the treatment of acute and chronic pain such as rheumatoid arthritis, psoriatic arthritis, osteoarthritis, ankylosing spondylitis, chronic low back pain, gout, postoperative dental pain and dysmenorrhea.[1] This class of drugs have been developed owing to their enhanced upper gastrointestinal tolerability in addition to an effective pain management property compared to the conventional non-steroidal anti-inflammatory drugs (NSAIDs)[1]. Post-marketing surveillance has reported a few cases of toxic epidermal necrolysis,[2] erythema multiforme-like eruption,[3] fixed drug eruption,[4] acute generalized exanthematous pustulosis,[5] and drug induced pretibial erythema.[6] NSAIDs were one of the earliest classes of drugs associated with the development of oral ulcers.[7] The severe oral erosive and lichenoid lesions caused by COX-2 inhibitor rofecoxib has been reported.[8] However, there is rare case report of oral reactions induced by etoricoxib. This report presents the case of etoricoxib-induced oral ulceration.

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Case report

A 36-year-old woman was referred to the Oral Medicine Clinic, Dental Hospital, Faculty of Dentistry, Naresuan University, Thailand, for diagnosis and treatment of the one-week-old painful oral ulcer on her palatal mucosa. The patient's medical history revealed that she had received etoricoxib 90 mg capsule once a day for 3 days for the management of musculoskeletal pain. Patient developed extensive oral ulceration five days after etoricoxib was administered. The lesion was associated with severe pain and burning sensation. Patient denied cutaneous, nasal, ocular or genital involvement. Moreover, no history of trauma, smoking, alcohol, and any allergic reactions was also reported.

An intraoral examination revealed a shallow ill-defined irregular shaped painful ulcer (3.0 × 3.5 cm) on the palatal mucosa. The lesion was easily bleeding, partially covered by a yellowish fibropurulent exudate, and surrounded by an erythematous and inflamed tissue (Figure 1). A clinical impression was drug induced oral ulcer. Treatment plan included withdrawing the suspect drug and palliative therapy. The biopsy was not performed because of a clear relationship between the etoricoxib and oral lesion. The patient was treated with prednisolone 40 mg/day, tapered over 3 weeks, as well as chlorhexidine

mouthwash once daily. A follow-up examination was done 1 week later. The oral ulceration was significantly improved and the topical steroid, 0.1% fluocinolone acetonide in orabase was prescribed three times daily. The oral lesion was completely healed after 4 weeks (Figure 2). At three months follow-up appointment, no recurrence or development of new lesion have occurred. These effective treatments provide a clear evidence supporting the association of administered etoricoxib drug and oral lesions. Therefore, patient was informed not to take this drug.

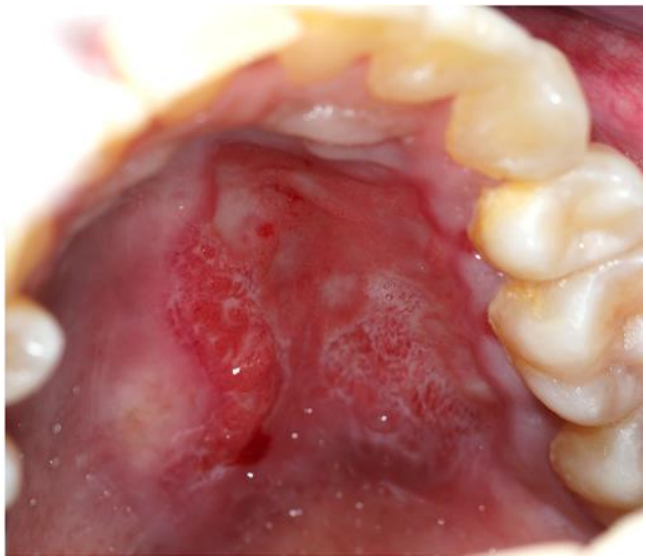

Figure 1. Extensive Oral Ulceration on the Palatal Mucosa.

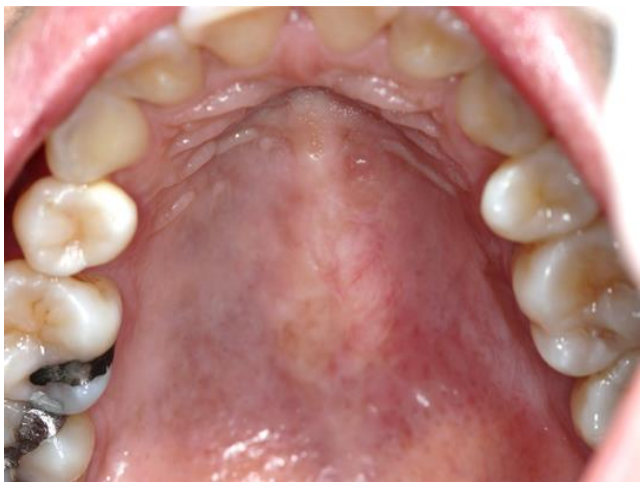

Figure 2. Four Weeks Follow-up Showed Complete Remission of Oral Lesion.

Discussion

Adverse drug reactions are common and will likely to be increasingly found as the newer therapeutic agent are developed.[7] Oral mucosa is one of the tissues where the oral lesion can be developed as a result of the drug reaction.[9] Drug induced oral lesions are not typically found and, therefore, sometimes are not easy to recognize. These lesions can be diagnosed based on detailed medical history and clinical findings.

Typically, these reactions are detected within weeks or months after taking the medications. If the lesion occurs prior to the administration of the drug, the drug interaction must be excluded. If the lesion is improved after stop taking the suspect drug, the lesion will be most likely caused by the suspect drug. Furthermore, recurrence with rechallenge confirms the diagnosis, even though this may not be feasible, impractical, and potentially dangerous. Concurrent medications must be noted.[7]

The most common clinical presentation of drug induced oral lesions are lichenoid reactions, ulcers, bullous disorders, pigmentation, fibrovascular hyperplasia, white lesions, dysesthesia, osteonecrosis, infection, angioedema, and malignancy.[7] This report presents rare case of adverse oral reactions associated with the COX-2 inhibitor etoricoxib. Extensive oral ulcer appeared and later resolved after the withdrawal of etoricoxib and palliative therapy. Although the lesions are normally resolved by itself after the discontinuing the causative drug, tropical and systemic corticosteroid is prescribed, depending on the severity of the lesion, to accelerate the healing and reduce pain as done in this case.

Although etoricoxib has several benefits over the conventionally used NSAIDS such as its effectiveness for the acute and chronic main management with fewer gastrointestinal side effect[1] and its use as alternative drug for NSAID intolerant patients,[10] this study demonstrated the etoricoxib induced oral reaction that could occasionally arise. Therefore, the clinicians should be aware not only of etoricoxib that is able to induce oral ulceration but also the other COX-2 inhibitors that can provoke oral lesions.

Conclusion

This report presents a rare case of a 36-year-old woman who had etoricoxib-induced extensive oral ulceration. The clinicians should be aware of the unwanted side effect of etoricoxib as well as the other COX-2 inhibitors that can cause oral ulcer even though it rarely occurs.

Conflicts of interest

The authors have no relevant conflicts of interest to disclose.

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