

# Self-inflicted traumatic ulcer due to preoperative anxiety in children

## Ulser traumatik *self-inflicted* yang disebabkan kecemasan preoperasi pada anak

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### ABSTRACT

**Introduction:** Self-inflicted traumatic ulcers are oral lesions caused by the patient himself, that can be caused to intentional bad habits, accidents or habits that occur without realizing it. Self-inflicted lesions are present in about 75% of the head and neck area, and can be caused by biting tissue in the oral cavity or inserting foreign bodies and nails into the oral mucosa. **Case:** It is reported a case of traumatic self-inflicted ulcer in a 4-year-old child. This patient was diagnosed with intra-abdominal tumors and planned to undergo surgery. During the preoperative treatment, the patient experienced anxiety and repeatedly bit and sucked the lip and cheek area. Clinically, white plaques and ulcers were seen with a wide elevation in the lip and cheek area. **Management:** Against patients conducted 0.9% NaCl compress 3 times a day and were given positive suggestions to reduce anxiety. **Conclusion:** In addition to topical medication for treatment of self-inflicted traumatic oral lesion, it is also necessary to give adequate care from health personnel and positive suggestion to reduce preoperative anxiety in pediatric patient who will undergo surgery. **Keywords:** anxiety, preoperative, self-inflicted, traumatic ulcers

### ABSTRAK

**Pendahuluan:** Ulser traumatik *self-inflicted* merupakan lesi oral yang diakibatkan oleh diri pasien sendiri yang disebabkan adanya kebiasaan buruk yang disengaja, kecelakaan atau kebiasaan yang terjadi tanpa disadari. Lesi *self-inflicted* terdapat sekitar 75% pada area kepala dan leher, dan dapat disebabkan oleh menggigit jaringan pada rongga mulut atau memasukkan benda asing dan kuku pada mukosa oral. **Kasus:** Dilaporkan kasus traumatik ulser *self-inflicted* pada anak usia 4 tahun. Pasien didiagnosis tumor intra-abdomen dan direncanakan untuk pembedahan pengangkatan tumor oleh Bagian Bedah Anak. Selama perawatan praoperasi, pasien mengalami kecemasan dan berulang kali menggigit dan mengisap area bibir dan pipi. Secara klinis terlihat ulser dan plak putih disertai peninggian yang melebar di area bibir dan pipi. **Penatalaksanaan:** Kompres NaCl 0,9% diberikan 3 kali sehari, dan juga pemahaman-pemahaman positif untuk mengurangi kecemasan. **Simpulan:** Selain pengobatan topikal untuk pengobatan lesi oral *self-inflicted*, juga perlu diberikan perawatan yang memadai dari tenaga kesehatan dan sugesti positif untuk mengurangi kecemasan praoperasi pada pasien anak yang akan menjalani operasi.

**Kata kunci:** kecemasan, preoperasi, *self-inflicted*, ulser traumatik

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### INTRODUCTION

Self-inflicted oral lesions may occur due to aggressive oral habits or a disturbed emotional state. The etiology of these lesions is diverse. Habits such as finger sucking, nail biting or lip biting, bruxism, chemical injury and placing foreign objects in the mouth can play a role in this phenomenon.<sup>1</sup> This self-inflicted lesion is a very important health factor that can affect individuals at any age and their incidence is increasing in pediatric patients.<sup>2</sup> Self-inflicted oral lesions are present in about 75% of the head and neck area. These lesions can occur due to repeated bites of the tissue or by insertion of foreign objects and nails into the oral mucosa. Clinically, they may appear as hyperkeratotic, erythematous, ulcerated lesions.<sup>3</sup>

It is estimated that 70% of children who will undergo surgery may experience preoperative anxiety that is defined as subjective feelings of tension, nervousness, worry and sleep deprivation associated with increased autonomic nervous system activity.<sup>4</sup> Factors that can increase the degree of preoperative anxiety in patients

include the possibility of postoperative pain, separation from family members, contact with strangers, fear of surgery, and the possibility of being difficult to move, thereby increasing the degree of preoperative anxiety in patients.<sup>5</sup> We report a case of a self-inflicted oral lesion that occurred in a child who was about to undergo surgery on the abdomen, causing anxiety before surgery. The patient responds to preoperative anxiety by biting and sucking the lips resulting in extensive traumatic ulcers.

### CASE

A 4-year-old pediatric patient was referred from Pediatric Surgery Department to the Oral Medicine Department due to complaints of sores on the lips. This patient was treated in preparation for intra-abdominal tumor surgery. From the patient's parents, it is known that the wound on the lip lasted about 2 days of treatment in the hospital. The patient often bites and sucks the lower and upper lips. Her parents suggest that it might come from anxiety facing surgery. Intraoral examination revealed an ulcer accompanied by white plaque on the up-



**Figure 1** Ulcers on **A** upper and lower lips; **B** lower labial mucosa; **C** extending to the lower labial; **D** left buccal mucosa



**Figure 2** Ulcer has improved, there are only crusts on the **A, B** upper lip; **C, D** ulcers on the lower labial and buccal mucosa

per lip that extends to the upper labial area and on the lower lip, the lesion extends to the inner buccal area (Fig. 1).

### MANAGEMENT

The diagnosis made at this first visit was a traumatic ulcer. The management for oral lesions in children is compressing the wound with sterile gauze moistened with 0.9% NaCl three times a day and also giving oral health instructions, information communication and education to avoid the habit of biting and sucking the cheeks so that more severe oral lesions do not occur. Patient also given positive suggestion in order facing surgery.

Two weeks later, the wounds on the lips and cheeks have improved. White plaque on the upper labial mucosa and lower buccal mucosa was thinned, there was only a slight crust on the upper lip (Fig. 2). The habit of sucking and biting the lips has decreased considerably. It is also known that the patient had surgery for intra-abdominal tumour surgery. Patient instructed to continue compress wound with gauze soaked in NaCl 0.9%.

The intraoral condition after the intra-abdominal tumor surgery showed no lesion on the upper and lower lip mucosa and no lesions in the buccal mucosa (Fig. 3). The habit of biting and sucking lips has been stopped.



**Figure 3** Ulcers on **A** the upper lip; **B** lower labial mucosa; **C** lower buccal mucosa have healed

### DISCUSSION

A self-inflicted oral lesion is a behavioral disorder that causes intentional damage to the oral area.<sup>5-7</sup> These oral injuries are important factors that can affect individuals of any age or sex and their incidence is increasing in pediatric patients.<sup>2</sup> The most common forms of self-inflicted injury are cuts, burns, scratches, blunt object

injuries, bites and impaired wound healing. The anatomical location that is often affected is the head, especially the oral and perioral tissues, the hands and neck.<sup>8</sup>

This intentional injury has a functional or organic cause. Functional self-inflicted is described as a form of deviant behavior characterized by intentional harm to any part of the body without suicidal intent.<sup>9</sup> It can be used as a tool to escape responsibilities or seek attention and is often found to emerge in times of stress, hunger, frustration and reactions to bullying.<sup>10</sup> Organic causes of self-inflicted injury are secondary to genetic defects and neurophysiological abnormalities, such as Lesch Nyhan syndrome, Munchausen syndrome, familial dysautonomia and congenital pain insensitivity, as well as other entities such as autism and mental retardation.<sup>3,11</sup>

This case report occurs in a girl who was planned for surgery to remove an intra-abdominal tumor. The preoperative anxiety felt by the patient caused the habit of biting and sucking the lips, causing ulcerated lesions on the upper lip that extended to the upper labial mucosa and the lower labial mucosa that extended to the buccal mucosa. Preoperative anxiety is said to occur in up to 70% of children.<sup>4</sup> Anxiety in the preoperative period can be feelings of tension, nervousness, restlessness, fear or psychological stress. Some children can communicate their fear, while others show anxiety by changing behavior, such as being restless, shaking, breathing deeply, having difficulty speaking, crying or being difficult to control.<sup>5</sup> Some literatures discusses how to overcome preoperative anxiety in children, including playing music, providing drawing tools, and psychological assistance.<sup>5,12-14</sup> Positive suggestions are also known to reduce pain and anxiety in patients.<sup>15,16</sup>

The management for the complaints in this patient is to use a compress on the ulcerated area of the mucosa with sterile gauze moistened with 0.9% NaCl 3 times a day. The NaCl 0.9% or saline solution is known to help hemostasis to provide an optimal environment in the wound area by helping to moisten the wound surface.

This saline moistened gauze can remove or absorb exudate, reducing pain and providing comfort.<sup>17</sup> In addition, some of the properties of saline solution are, it can draw fluid from the wound so as to prevent tissue rupture, is hypoallergenic so it does not interfere with the healing process, and does not change the normal microflora in the wound area.<sup>18</sup> Besides pharmacological therapy, patients are also given non-pharmacological therapy in the form of positive suggestions to reduce preoperative anxiety.

Pediatric patients with self-inflicted oral lesions

who will undergo surgery require comprehensive approach to deal with preoperative anxiety that arises. Adequate care and positive suggestions from medical personnel can reduce preoperative anxiety in patients.

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#### CONFLICT OF INTEREST

None to be declared

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