



Alveolar healing with Alveogyl

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Summary

Male patient with longitudinal fracture of tooth 13 that was impossible to restore. The tooth was indicated for extraction and the patient was informed about the possibility of performing a

bone regeneration immediately after extraction; the patient refused a treatment. We proceeded to perform an atraumatic extraction and follow a dry socket prevention protocol.

Introduction

Alveolar healing is a predictable and safe process, however there are situations which jeopardise the integrity of the alveolus and its future healing. Among the most common post-extraction complications is a dry socket or alveolitis (2), a situation caused by the lack of bleeding and the lack of formation of a good-quality clot.

Dry socket is a condition that causes intense and acute pain in the area where the extraction was performed (5). Its aetiology is the exposure of bone that could not be covered with granulation tissue due to inadequate bleeding. On average, the pain that the patient reports is on the third day after the procedure and is often treated as a dental emergency.

The treatment consists in inducing bleeding in the alveolar bone to ensure the formation of a clot. In addition to this, aids are used such as collagen-based haemostatics, surgical cements, or haemostatic fibrous matrices, the latter better known as the Septodont brand Alveogyl. In addition to being used as a curative, the indications for Alveogyl have been broadened to include haemostasis immediately after performing the dental extraction.(3)

The following publication presents a clinical case using Alveogyl to prevent alveolitis.

Case presentation

A 55-year-old patient presented for consultation with the reason given as “my tooth has fractured and it needs to be removed.” The patient was clinically examined and it was observed that tooth 13 was fractured, compromising the integrity of the rest of the tooth and its stability inside the alveolus.

The extraction was performed atraumatically in order to avoid rupturing the cortical layers and damage to soft tissues (*fig. 1*). After this, adequate bleeding was verified so that an instrument to induce bleeding in the bone was not necessary.

A small amount of Alveogyl was placed inside the alveolus to maintain haemostasis (*fig.2*). There are Penghawar fibres among the material components, and they generate a network in which fibrin will form the initial clot. The fibrous structure provides the ideal environment for a strong and high-quality clot, preventing the appearance of alveolitis (1).

The instructions given to the patient focused on avoiding dislodging the Alveogyl prematurely. In some instances, Alveogyl can remain for more than a week and be uncomfortable for the patient. It doesn't irritate the new tissue, however, and the only reason to return to the practice is to remove fibres which haven't been eliminated.

The patient was prohibited from using cleaning items such as toothpicks, swabs, or a toothbrush in the extraction area as these might damage the clot formed and even dislodge it (4).

Although Alveogyl was initially indicated to treat alveolitis, its bioadhesive properties mean that it can be used in post-extraction sites.

During the 7 day post-operative check-up, we observed that the fibrin layer created by the body was thick and stable, the surrounding tissues showed no signs of inflammation or irritation (*fig. 3*), and the patient reported no pain or discomfort. It is necessary to clarify that these procedures were not orientated toward a major bone regeneration greater than that which the body will perform.

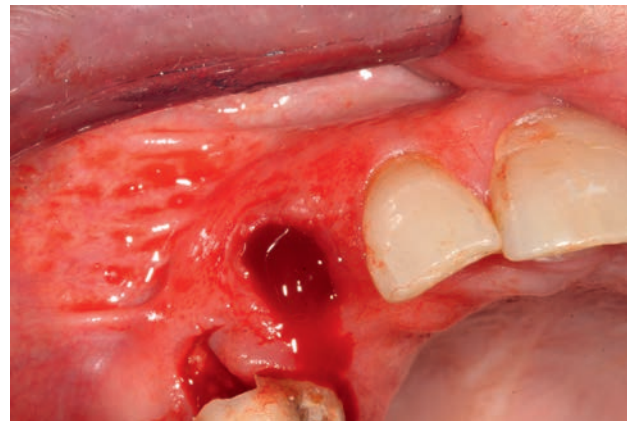


Fig. 1: the alveolus presents an adequate amount of bleeding to form a clot.



Fig. 2: the Alveogyl fibres stabilise the clot and avoid exposing the bone.



Fig. 3: during the 7 day check-up, we observed stable tissues and the thick fibrin layer. Excess fibres were removed.

Conclusion

The use of dressings like Alveogyl helps encourage good quality healing, avoiding post-operative complications such as alveolitis and reassuring the patient as to the progress of their treatment. Establishing good alveolar healing improves the patient's condition for a future prosthetic reconstruction. This increases the probability that a patient will accept future treatments to help bring back their masticatory function.

It is important to talk to the patient before carrying out the extraction because this procedure does not get rid of the problem. On the contrary, it creates another problem which is the absence of teeth and limited functioning. With proper planning, a good diagnosis, and planned future treatments, patients will be more aware of the importance of rehabilitation after a dental extraction.



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Alveogyl

Indications: Alveogyl is a paste used as dressing in case of dry socket or post-extraction dressing following a difficult or traumatic extraction in patients with history of dry sockets.