Relief of discomfort and inflammation through surgical extraction of an impacted tooth: A case report

Yuhan Liu; Wenling Tian; Zhenchao Gao; Te Ba; Qiang Zhao*

*Corresponding Author: Qiang Zhao
Department of Stomatology, Aviation General Hospital of China Medical University and Beijing Institute of Translational Medicine, Chinese Academy of Science, Beijing 100012, China.
Email: liuyuhanbc@163.com

Patient Background

A 28-year-old female patient presented to our dental department with a complaint of discomfort and pain in the back of her mouth on the left side. The patient reported that she had been experiencing the discomfort for the last few days and was unable to eat or drink properly. The patient had no significant medical history or allergies.

Dental History

The patient had no significant dental history except for occasional tooth decay and cavities. She reported that she had never had any of wisdom teeth removed.

Clinical Examination

Upon clinical examination, we found that the patient had an impacted right lower wisdom tooth (tooth number 38). The tooth was partially erupted and was causing significant discomfort and inflammation in the surrounding tissues. The remaining teeth in the arch had no notable findings.

Diagnostic Tests

To confirm the diagnosis and determine the position of the impacted tooth, we performed a panoramic radiograph, which showed that the tooth was impacted horizontally and was in close proximity to the adjacent teeth (Figure 1).
Treatment

After obtaining informed consent and administering local anesthesia, the surgical site was prepared with antiseptic solution. A flap was created to expose the impacted tooth, and bone was removed as necessary to fully visualize the tooth. The tooth was then sectioned into multiple pieces using a dental handpiece and burs. Care was taken to avoid any damage to the surrounding tissues, including the adjacent teeth, nerves, and blood vessels. After the tooth was fully removed, all the remaining debris or bone fragments were carefully removed to promote healing. A bone regenerative collagen material was placed in the socket to promote new bone growth and accelerate healing.

Once the socket was clean and dry, sutures were placed to close the flap and promote healing.
The patient was given post-operative instructions, including pain management medications, as well as instructions on oral hygiene practices and diet modifications to promote healing and prevent complications (Figure 2).

Follow-up

The patient returned for a follow-up visit one week later, reporting significant relief of pain and no discomfort. On clinical examination, the surgical site showed significant healing with no signs of infection or inflammation.

Conclusion

In conclusion, the case report demonstrates the importance of prompt diagnosis and timely treatment of impacted wisdom teeth. Impacted wisdom teeth can cause significant discomfort, pain, and inflammation, and if left untreated, can lead to more severe dental problems, such as gum disease and tooth decay. Surgical extraction of impacted wisdom teeth is a common and effective treatment option that can relieve pain and prevent further complications. However, it is crucial to carefully evaluate the position of the impacted tooth and consider the risks and benefits of the procedure before recommending an extraction. Early intervention and prompt treatment can lead to better outcomes and faster healing of the surrounding tissues. Regular dental check-ups and monitoring of the development of wisdom teeth can help detect potential problems early on and prevent the need for surgical intervention. Patients should also be educated on the importance of good oral hygiene practices, including brushing and flossing regularly and maintaining a healthy diet, to prevent tooth decay and gum disease.

Overall, the successful management of impacted wisdom teeth requires a collaborative effort between the patient and the dental team, with a focus on individualized care and patient education.