

Procedures for Adjunctive Aesthetics in Orthognathic Surgery

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Abstract

Orthognathic surgery is a surgical procedure that is performed to correct severe dental and skeletal abnormalities that cause facial deformities. The procedure involves realigning the jawbone and/or the teeth to improve facial balance, function, and aesthetics. While the primary goal of orthognathic surgery is to correct functional issues, it can also result in significant aesthetic improvements. In some cases, adjunctive aesthetic procedures can be performed alongside orthognathic surgery to enhance the overall appearance of the face. These procedures may include rhinoplasty, genioplasty, and soft tissue augmentation. When performed in combination with orthognathic surgery, these procedures can result in a more harmonious and balanced facial appearance.

Keywords: Orthognathic surgery • Aesthetics surgery • Orthodontics

Introduction

Rhinoplasty, also known as a nose job, is a cosmetic surgical procedure that is performed to improve the appearance of the nose. In some cases, the nose may appear too large or too small in relation to the rest of the face, which can be corrected through rhinoplasty. Rhinoplasty can also correct functional issues, such as a deviated septum or breathing problems. Genioplasty, or chin surgery, is a cosmetic surgical procedure that is performed to improve the appearance of the chin. In some cases, the chin may appear too small or too large in relation to the rest of the face, which can be corrected through genioplasty. Genioplasty can also improve the profile of the face, creating a more balanced and aesthetically pleasing appearance [1].

Soft tissue augmentation involves the use of fillers or fat grafts to add volume to specific areas of the face, such as the lips or cheeks. Soft tissue augmentation can enhance the overall appearance of the face, creating a more youthful and vibrant look. In some cases, soft tissue augmentation may also be used to fill in areas of the face that have been affected by orthognathic surgery, such as areas where bone has been removed [2].

Literature Review

While adjunctive aesthetic procedures can enhance the overall results of orthognathic surgery, they should be approached with caution. It is important to carefully evaluate each patient's individual needs and goals before recommending any additional procedures. Additionally, it is important to ensure that the patient fully understands the risks and benefits of each procedure before undergoing surgery. Background: The primary objectives of orthognathic surgery are to restore occlusion and treat dentofacial abnormalities. Patients who receive orthognathic surgery should have enhanced face aesthetics and appropriate jaw function as a result. High standards for aesthetics and the need for precise occlusion have increased the difficulty of orthognathic surgery. Thus, these individuals have a significant requirement for adjuvant

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simultaneous surgery. We discuss our experience conducting various concurrent adjunctive procedures along with orthognathic surgery [3].

Methods: From 2012 to 2016, 135 patients received simultaneous operations. For all patients, traditional and three-dimensional planning was used to achieve ideal soft tissue projection and jaw alignment. After the jaws had been repositioned, ancillary procedures were carried out as scheduled. Orthognathic surgery included chin osteotomy (40%), rhinoplasty (20%), and other procedures. Orthognathic surgery, also known as jaw surgery, is a type of surgical procedure performed to correct a wide range of skeletal and dental abnormalities in the jaw and face. The goal of the surgery is to improve the patient's ability to chew, speak, and breathe, as well as to improve their overall facial appearance [4].

The procedure involves the realignment of the upper and/or lower jaws to improve their position, size, or shape. It may also involve the repositioning of the teeth or the addition or removal of bone from the jaws. Orthognathic surgery can be performed on patients of all ages, but it is typically recommended for individuals who have completed their growth and development, usually around the age of 18 [5].

Discussion

There are several conditions that can be corrected with orthographic surgery. Some of the most common conditions include:

Malocclusions: Malocclusions are dental abnormalities that can affect the way the teeth fit together. This can lead to difficulty chewing, speech problems, and jaw pain. **Facial asymmetry:** Facial asymmetry occurs when one side of the face is larger or smaller than the other. This can be caused by a variety of factors, including genetics, injury, or illness. **Sleep apnea:** Sleep apnea is a condition in which a person's breathing is repeatedly interrupted during sleep. Orthognathic surgery can be used to correct the underlying skeletal abnormalities that contribute to the condition [6].

Temporomandibular joint disorder (TMJ): TMJ is a condition that affects the joints and muscles of the jaw. Orthognathic surgery can be used to correct the underlying skeletal abnormalities that contribute to the condition. Orthognathic surgery is typically performed in a hospital setting and requires general anesthesia. The procedure can take several hours to complete, depending on the extent of the surgery. During the procedure, the surgeon will make incisions in the jawbone and reposition it as necessary. The incisions are then closed using sutures or other types of closure techniques. Recovery from orthognathic surgery can take several weeks or months. The patient may experience swelling, bruising, and pain in the jaw and face for several days or weeks after the procedure. Pain medication may be prescribed to help manage these symptoms. The patient will also need to follow a specific diet to allow for

proper healing of the jaw. While orthognathic surgery can be a complex and intensive procedure, it can offer significant benefits for patients who suffer from a wide range of skeletal and dental abnormalities. Some of the benefits of orthognathic surgery include:

Improved appearance: Orthognathic surgery can improve the overall appearance of the face by correcting facial asymmetry and other abnormalities. **Improved function:** Orthognathic surgery can improve the patient's ability to chew, speak, and breathe by correcting malocclusions and other skeletal abnormalities. **Improved quality of life:** Many patients report an improved quality of life after orthognathic surgery, including better self-esteem, improved social interactions, and improved overall health.

Long-lasting results: Orthognathic surgery can provide long-lasting results, with many patients experiencing improved function and appearance for years or even decades after the procedure. In conclusion, orthognathic surgery is a complex surgical procedure that can offer significant benefits for patients with a wide range of skeletal and dental abnormalities. While the procedure can be intensive and require a lengthy recovery period, it can provide long-lasting results that improve both function and appearance. Patients who are considering orthognathic surgery should consult with an experienced surgeon to determine if the procedure is appropriate for their individual needs and goals.

Conclusion

Adjunctive aesthetic procedures can be a valuable addition to orthognathic surgery. By enhancing the overall appearance of the face, these procedures can help to create a more balanced and aesthetically pleasing result. However, it is important to approach these procedures with caution and to carefully evaluate each patient's individual needs and goals. With proper planning and execution, adjunctive aesthetic procedures can result in significant improvements in both function and aesthetics.

Acknowledgement

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Conflict of Interest

None.

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