



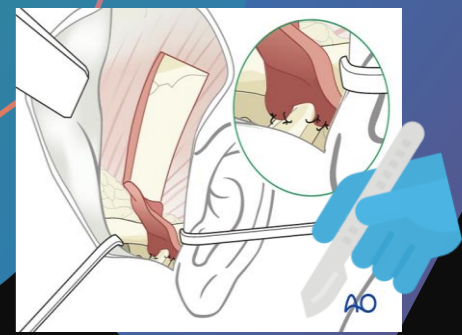
GAP ARTHROPLASTY WITH INTERPOSITIONAL TEMPORALIS FASCIA IN THE MANAGEMENT OF TEMPOROMANDIBULAR JOINT ANKYLOSIS :

A Case Report

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INTRODUCTION

TMJ ankylosis is a serious condition and needs to be considered because it can cause disturbances in facial growth, chewing, ingestion, digestion, speech, appearance, and impaired oral hygiene with caries rampant.

causing limited or inability of the patient to open the mouth and usually has an impact on oral hygiene and quality of life.

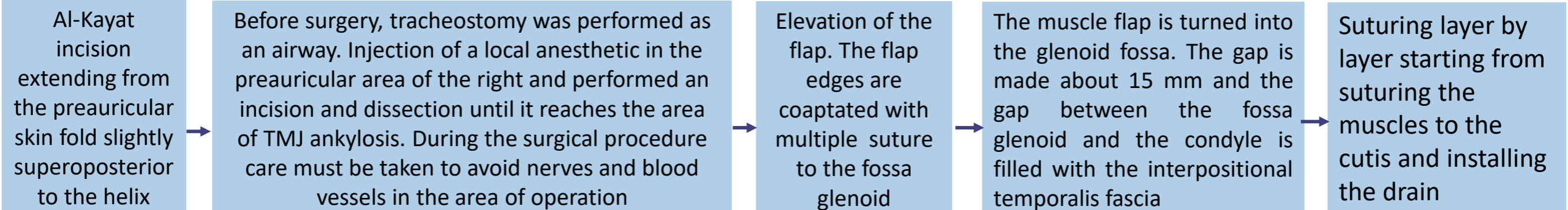
Surgery is the definitive therapy for temporomandibular joint ankylosis.

Techniques commonly used for the management of temporomandibular joint ankylosis include; **gap arthroplasty**, interpositional arthroplasty, and joint reconstruction with bone graft or joint prosthesis and more recently, a combination of gap arthroplasty

OBJECTIVE

- The aim of this article is to present a case report provide overview about management of temporomandibular joint ankylosis with gap arthroplasty use interpositional temporalis fascia
- The success of ankylosis treatment using the Gap Arthroplasty technique is quite significant, it can be seen from the assessment of the mouth opening size

TREATMENT PROCEDURES



PRE-OPERATIVE FINDINGS

- Deformity of the TMJ
- Shortening of the right mandible
- Ankylosis of the head of the right condyle
- Left condyle on the anterior side coinciding with the articular eminence.
- Difficult to open the mouth

INTRAOPERATIVE DOCUMENTATION



POSTOPERATIVE DOCUMENTATION SEVENTH DAY



DISCUSSION

The treatment of patients with temporomandibular ankylosis is aimed at; prevent disease progression, restore mandibular shape and function and eliminate complaints and limitations. Gap arthroplasty involves making a minimum gap of 10 mm and some literature suggests about 15 mm by reducing ankylosing mass.^{1,2} The choice of the gap arthroplasty technique was due to the high success rate, according to the literature of 50 patients, 8 who complained of reankylosis.^{2,4} The advantage of this technique; easy, short operation time and the success rate of treatment with Gap Arthroplasty around 83 percent . The disadvantages of this technique include; The short ramus sometimes results in an anterior open bite in bilateral ankylosis and unilateral open bite, failure to eliminate bone pathology, and increases the risk of recurrence.^{3,4} There is a way to reduce the occurrence of an open bite condition and deviation of the mouth to the contralateral direction when opening the mouth, namely by making an improper gap in the articulation area. Complication of Gap Arthroplasty is Frey Syndrome (Facial neuropraxia, Venous thrombosis, Otitis externa and otalgia, Facial scarring).^{9,10} The risk of recurrence after gap arthroplasty technique is high.¹⁰ During the surgical procedure care must be taken to avoid nerves and blood vessels in the area of operation.^{6,9} The success of the meticulous surgical reconstruction is dependent on good physiotherapy and patient acceptance. And hence early physiotherapy is important in disrupting adhesions and subsequent soft tissue contractions.¹⁰

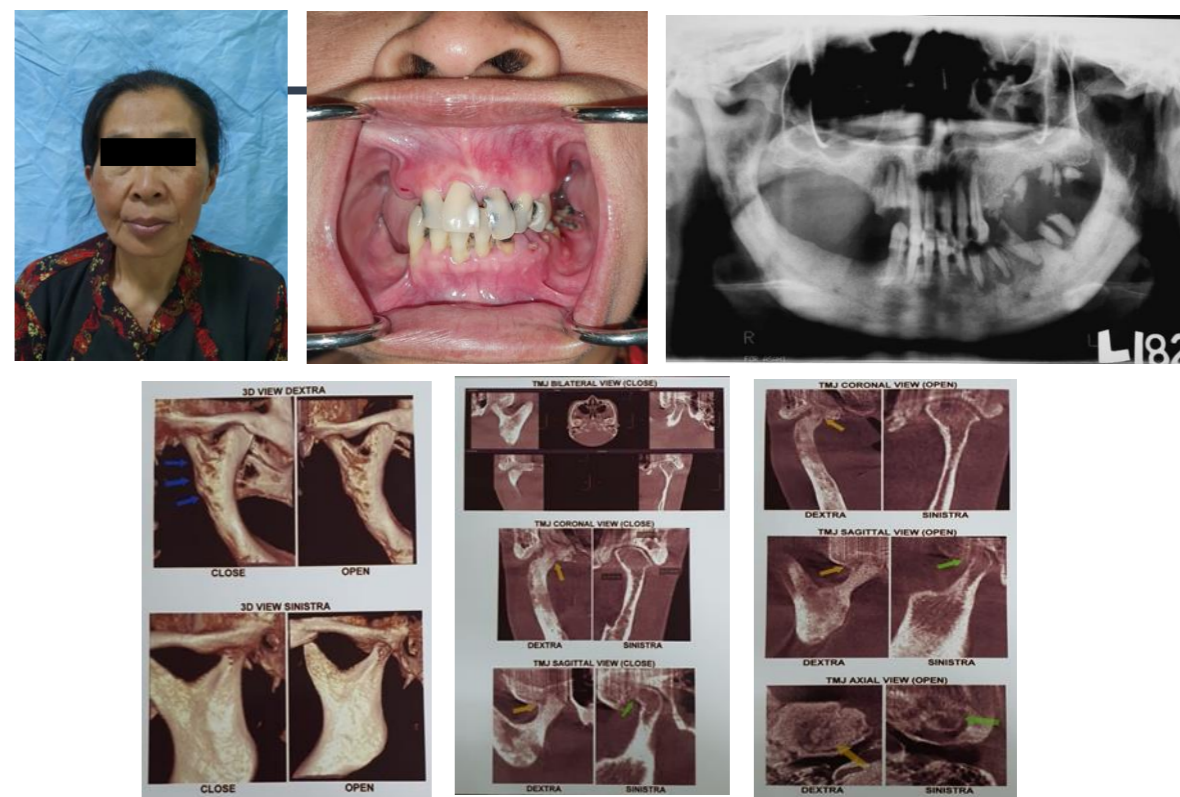
CONCLUSION

Ankylosis is a synarthrosis and hence the first attempt at ankylosis release consists of simple bone division to separate the ramus from the cranial base and creating a pseudoarthrosis. Inter-position of the temporalis fascia in gap arthroplasty has superior results than other non-vascular interpositional graft and reconstruction materials in terms of functional stability of joint, recurrence and economical which proves its versatility in the management of TMJ ankylosis

CASE REPORT

- 47-year-old female patient presents with complaints and pain when opening her mouth and took painkiller
- +/- 10 years before admitted to the hospital, the patient had a toothache in the upper and lower right
- +/- 4 years before admission, the patient began to complain of pain in the right jaw joint, intermittent, but the patient did not seek any treatment
- +/- 3 years before admission the patient complained of a stiff jaw joint and could not open his mouth wide for 2 weeks
- +/- 9 months before admission the patient complained about the opening of his mouth which gradually shrank
- +/- 7 months of before admission the patient came to Hasan Sadikin Hospital for further treatment and a jaw x-ray, CBCT was performed.

ASSESSMENT



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