

## Research Article

### Delayed Stitch Sinus Development Post Face and Open Neck Lift

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#### Abstract

Face and neck lift is a common aesthetic surgery procedure where deep non-absorbable sutures can be used. Amongst the complications, delayed presentations of infections are scarcely reported. The authors report a case of a 65-year-old lady who presented with a 6-week history of swelling on both sides of the post-auricular region. This patient had received a minimal access cranial suspension face lift with open neck lift 10 years ago using two 2/0 Ethibond sutures for both lifts. There was no history of previous complications of the surgery. On examination, a stitch was visible on the right post-auricular area, which was removed. The left post-auricular area developed discharge a couple of days later and was managed similarly. Both areas healed within a few days. Our report identifies the risk of delayed development of stitch sinus and the role of appropriate surgical management, should signs of infections occur.

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#### Introduction

Face and neck lift surgery is a common aesthetic procedure where deep non-absorbable sutures are often used. Amongst the complications of face and neck lift surgery, infections leading to stitch sinuses are not generally known to occur. Although rare, stitch sinuses can cause a significant level of discomfort and morbidity to patients. We report a rare, delayed presentation of stitch sinuses 10 years after surgery and discuss its management.

#### Case Report

A 65-year-old lady presented with a 6-week history of bilateral symmetrical swelling of her post-auricular area. There was no history of previous complications. This patient had received a minimal access cranial suspension (MACS) face lift with open neck lift 10 years ago using 2/0 Ethibond sutures. The swelling eventually burst open with discharge. On examination, there was a visible stitch on the right post-auricular area, which was removed, and the area healed within

a few days (Figure 1). A couple of days later, the patient presented at the clinic again with a history of similar discharge on the left post-auricular area with a visible stitch which was subsequently removed (Figure 2). This side also healed within a few days. The patient remained asymptomatic and there has not been any swelling since.

#### Discussion

Face and neck lift is one of the common aesthetic procedures in the UK with 2134 recorded surgeries performed in 2019, a 7% increase from 2018.<sup>1</sup> Face and neck lifts have also consistently remained a popular surgical procedure for the last 10 years. Despite its popularity and widespread public acceptance, complications related to face and neck lift surgery continue to persist. These complications can be minimised by optimising the approach across three main areas: pre-operative assessment and surgical planning, intraoperative surgical manoeuvres, and postoperative care.<sup>2</sup> Stitch sinuses can often present with erythema and tenderness to the auricular cartilage which may cause

significant discomfort and morbidity to patients. It is recommended that the offending suture(s) are removed and local wound care with an antimicrobial ointment applied<sup>2</sup>. Significant erythema and tenderness may require oral antibiotics to cover Staphylococcus, Streptococcus and Pseudomonas to prevent permanent damage to the cartilage<sup>2</sup>. This case reports a delayed presentation of stitch sinus after 10 years but with no symptoms of infection previously. The same sutures were used for the MACS face lift and neck lift, but the sinuses only developed in relation to the neck scars within the post auricular regions. The reason for these unusual presentations is difficult to explain but surgical removal resolved the problem and the patient remained asymptomatic.

Lee et al also reported a similar case of a patient with symptomatic unilateral periauricular sinus after undergoing a midface facelift two years prior<sup>3</sup>. The cause of the presentation was due to a preauricular sinus, which is a rare benign congenital malformation of the preauricular soft tissues<sup>4</sup>. Preauricular sinuses are mainly asymptomatic, but are inherited as incomplete dominant traits with various symptoms, have a male to female sex ratio of 2:35, and 50% of incidences are bilateral<sup>6</sup>. The possibility of congenital lesions must always be considered and surgeons should carefully assess the preauricular area before undergoing facelift surgery.

The authors advocate for more similar cases to be reported within the literature in order to optimise approaches to management in addition to increasing the evidence base when considering choice of deep sutures between absorbable versus non-absorbable. Plastic surgeons should therefore be aware of the risk of delayed stitch sinus development in face and neck lift surgery and aim to inform patients of this potential complication many years after the procedure.



**Figure 1** *Stitch Sinus with Visible Stitch on the Right Post-Auricular Area*



**Figure 2** *Stitch Sinus with Visible Stitch on the Left Post-Auricular Area*

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