

Facial abscess from unlicensed thread lift

Singapore Med J 2020; 61(9): 498-499 <https://doi.org/10.11622/smedj.2020133>

Dear Sir,

Minimally invasive techniques for facial rejuvenation are very attractive to patients and physicians. Since the introduction of thread-lift sutures, their application to lifting sagging tissues has spread among many cosmetic practitioners. Thread lifts do not provide as remarkable results as traditional face-lifts, but they offer dramatic results in less time with relative ease of performance. However, there have been reports of complications arising from various thread-lifting procedures, including scarring, nerve damage and delayed thread migration.⁽¹⁾ There is growing concern over complications following this procedure, as it is increasingly performed at beauty salons by non-medical professionals. A search of PubMed® and MEDLINE® with the search terms: ‘thread lift’, ‘threadlift’ and ‘infection’ identified six relevant articles. After accounting for geographic location, there were no comparable results.^(2,3) Hence, to our knowledge, this is the first documented facial abscess from thread lift done by a non-medically trained beautician in Southeast Asia, and highlights potential infective complications if a supposedly minimally invasive procedure is done haphazardly.

A 48-year-old Chinese woman presented with right facial pain for three days. She had undergone a thread-lifting procedure by a beautician five days before. Six threads had been inserted bilaterally in a non-sterile environment in her home and without the use of sterile equipment. On further questioning, she did not recall the beautician cleaning her face before the procedure and no gloves were used. She had undergone two similar thread-lifting procedures the year before by various beauticians. On examination, the patient had right periorbital swelling and redness (Fig. 1). There was significant fluctuance over the right temporal region with visible puncture marks. Notably, the most lateral puncture wound was discharging pus. Computed tomography revealed a right facial abscess and preseptal cellulitis, without orbital cellulitis or subperiosteal abscess (Fig. 2). The patient underwent incision and drainage of the abscess and a 9-cm barbed thread was retrieved from the wound (Figs. 3 & 4). It is uncertain which brand of suture material was used. Wound culture grew *Staphylococcus aureus* and she completed one week of intravenous cefazolin 1 g every eight hours. The patient was discharged on Postoperative Day 8. At the one-month follow-up, her wound had healed.

About 15 years ago, the United States Food and Drug Administration approved the first thread-lift device as a minimally invasive alternative to traditional rhytidectomy without the larger surgical incisions and prolonged time of recovery. As reported by Obourn and Williams⁽⁴⁾ in their analysis of the literature over the past ten years, thread lifts offer limited long-term facial rejuvenation outcomes.

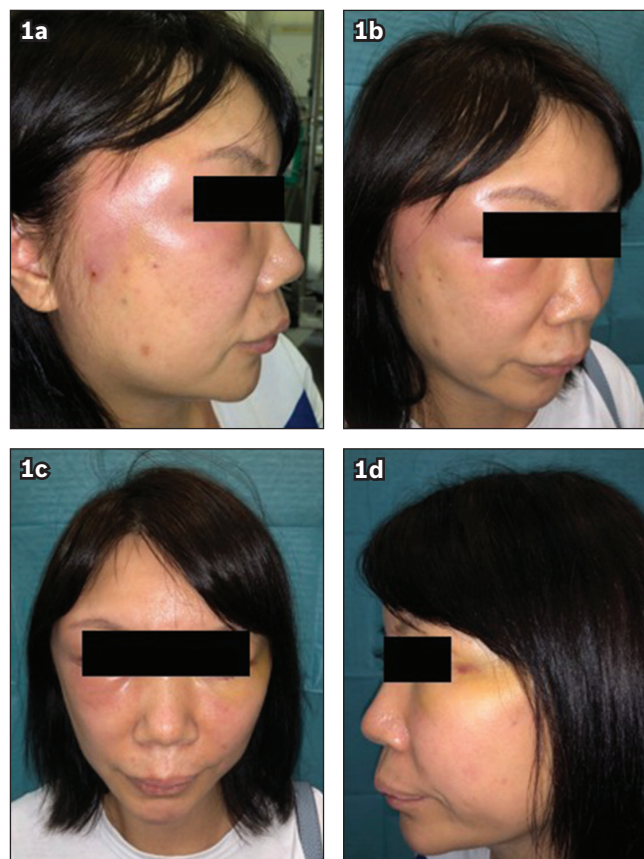


Fig. 1 Preoperative photos show the extent of erythema at (a) the right temporal region and (b) the periorbital region. (c) Frontal view and (d) the left cheek views for comparison. The left cheek photo (Fig. 1d) also shows the entry point for another thread.



Fig. 2 CT image shows the right facial abscess and preseptal cellulitis with superficial extension to the right preseptal periorbital, temporal, periauricular and submandibular region.

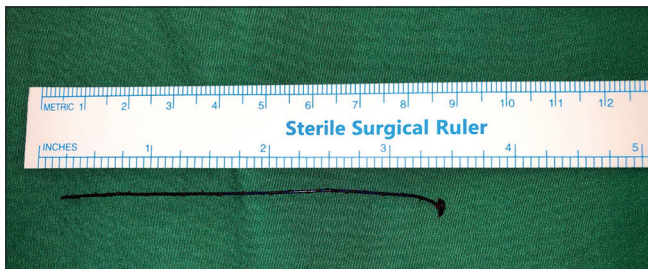


Fig. 3 Photograph shows barbed thread retrieved from the wound.

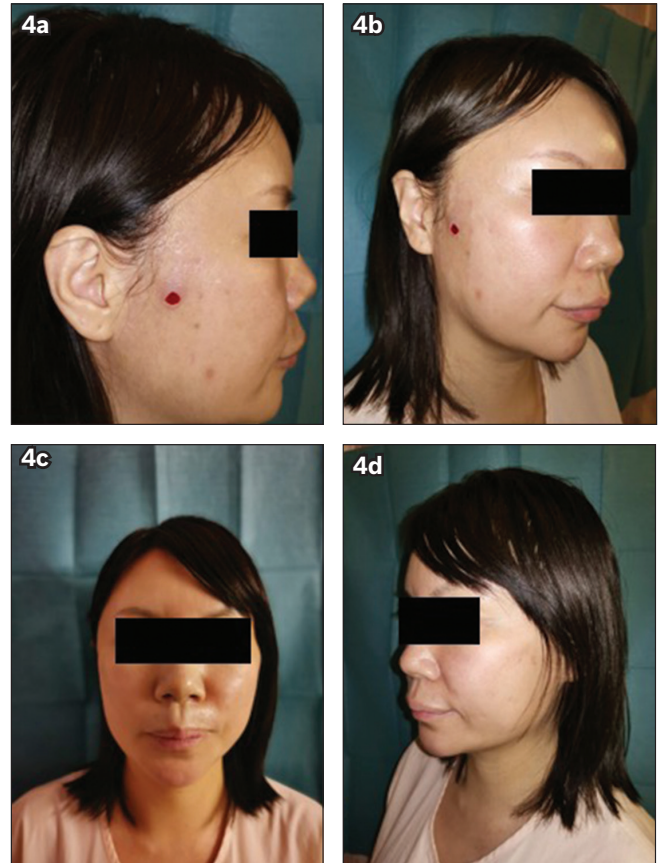


Fig. 4 Postoperative photos show the improvement in swelling and erythema in (a) lateral, (b) oblique, and (c) frontal views. (d) The left cheek is shown for comparison.

The advantages of thread lifts include their ease of use, readily available instrumentation and minimal downtime.^(5,6) However, concerns about their long-term safety, efficacy and patient satisfaction have limited their usage. Potential complications include swelling, bruising, thread extrusion, skin dimpling, contour irregularities, alopecia, asymmetry, intractable pain and paraesthesia, foreign body reaction and infection. As the popularity of thread lifting increases, the reported frequency of illegal practices in non-medical facilities has also increased. Shin et al⁽²⁾ reported a case of *Mycobacterium massiliense* granulomatous infection following a thread-lift procedure performed at a beauty salon. Principles of sterility apply even in minimally invasive procedures. This report serves as a timely notice to medical professionals to be wary of non-licensed or non-sterile usage of minimally invasive thread lifts, which can lead to undesirable side effects.

Yours sincerely,

Janna-Vale Joethy¹, Andrew Cheah¹, Chuan Han Ang¹

¹Department of Plastic, Reconstructive and Aesthetic Surgery, Singapore General Hospital, Singapore. janajoethy@hotmail.com

References

1. Beer K. Delayed complications from thread-lifting: report of a case, discussion of treatment options, and consideration of implications for future technology. *Dermatol Surg* 2008; 34:1120-3.
2. Shin JJ, Park JH, Lee JM, Ryu HJ. *Mycobacterium massiliense* infection after thread-lift insertion. *Dermatol Surg* 2016; 42:1219-22.
3. Kasai H, Yashiro K, Kawahara Y. Multiple ulcers on the face due to infection after thread-lifting. *J Dermatol* 2018; 45:e336-7.
4. Obourn CA, Williams EF. A decade of thread-lifting-what have we learned over the last 10 years? *JAMA Facial Plast Surg* 2018; 20:349-50.
5. Eremia S, Willoughby MA. Novel face-lift suspension suture and inserting instrument: use of large anchors knotted into a suture with attached needle and inserting device allowing for single entry point placement of suspension suture. Preliminary report of 20 cases with 6- to 12-month follow-up. *Dermatol Surg* 2006; 32:335-45.
6. de Benito J, Pizzamiglio R, Theodorou D, Arvas L. Facial rejuvenation and improvement of malar projection using sutures with absorbable cones: surgical technique and case series. *Aesthetic Plast Surg* 2011; 35:248-53.