

## COVID CONCEPT

### Use of Absorbable Cutaneous Sutures Amid the COVID-19 Pandemic

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#### ABSTRACT

The use of absorbable epicuticular sutures is highlighted as a measure to decrease the number of patient visits, eliminating the risk of additional exposures for patients and medical staff during the COVID-19 pandemic. We present a case where the use of absorbable epicuticular sutures was preferred over non-absorbable sutures. Studies have shown no significant difference in cosmetic outcomes between non-absorbing suture and absorbable suture. Many patients express anxiety over the thought of suture removal, and often ask if the sutures will “dissolve on their own” during the surgery. Use of absorbable top sutures is one way surgeons can help allay this fear, and studies have shown similar patient satisfaction between absorbable and non-absorbable sutures. Additional stress may be prominent during the current pandemic. Dermatologic surgeons should strongly consider the use of absorbable cutaneous sutures during this pandemic, as this likely improves patient and staff safety, and studies have shown similar cosmetic outcomes and patient satisfaction.

Absorbable cutaneous sutures are an option for dermatologic surgeons to decrease the number of times “high risk” patients return to the clinic, eliminating additional potential exposures for patients, surgeons, and medical staff to COVID-19.

An 88 year old woman with multiple comorbidities presented to the Mohs surgery service for treatment of a primary well-differentiated squamous cell carcinoma of the left nasal supratip. Her final wound size was 1.0 cm x 0.7 cm. After discussion with the patient, a primary closure was pursued. She was very anxious about returning to the clinic for suture removal, and absorbable surface sutures as an alternative to traditional non-absorbable sutures was preferred by the patient. Absorbable 4-0 buried poliglecaprone-25 sutures were used to close the superficial fascia and dermal layers. Absorbable simple interrupted 5-0

plain gut surface sutures were used to further approximate the wound edges (Figure 1). The patient was advised that plain gut surface sutures typically dissolve within 10-14 days with routine postoperative care. The patient returned three weeks later for an additional Mohs surgery procedure at a separate site. She had a well-healed scar, and stated she was satisfied with the cosmetic result of the nasal repair using absorbing sutures (Figure 2).

Studies have shown no significant difference in cosmetic outcomes between polypropylene non-absorbing suture and plain gut absorbable suture.<sup>1,2,3</sup> Many patients express anxiety over the thought of suture removal, and often ask if the sutures will dissolve on their own during the surgery. Use of absorbable epicuticular sutures is one way surgeons can help allay this fear, and studies have shown similar patient

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satisfaction between absorbable and non-absorbable sutures.<sup>4</sup> Additional stress may occur during the current COVID-19 pandemic, especially for patients considered high risk by CDC. The CDC initially identified patients over the age of 65 as high risk for COVID-19 mortality, but have now clarified that patients of all ages, including pediatric populations, can sustain significant morbidity from this virus. However, those over the age of 65 are more likely to have comorbidities.<sup>5</sup> Patients with chronic kidney disease, type 2 diabetes, chronic obstructive pulmonary disease, obesity, compromised immune systems (e.g. solid organ transplant patients), and heart disease are at a much higher risk of significant morbidity and mortality from COVID-19.<sup>5</sup> The American Academy of Dermatology recommends the use of absorbable sutures during the current pandemic as well.<sup>6</sup>

We requested that patients who did not return for in-person follow up, upload post-op photos via our patient portal system. These photos were then reviewed by the surgeons involved in the case. Along with the photos the patients were able to report any symptoms they may be having. Wounds were evaluated for healing, bleeding, cosmesis, and infection. Additionally, the Mohs medical assistant called all post-op patients 1 week after surgery to check in. No post-op wound infections occurred in this population, and all patients expressed satisfaction with their procedure.

Dermatologic surgeons should consider the use of absorbable cutaneous sutures during this pandemic in appropriate patients, especially for patients at higher risk for COVID-19 morbidity and mortality. This intervention likely improves safety for patients, physicians and medical staff, and studies have shown similar cosmetic outcomes and patient satisfaction.



**Figure 1.** Immediately post-op.



**Figure 2.** Two weeks post-op, well-healed scar.

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