

RESEARCH LETTER

Absorbable Sutures in the COVID-19 Era: A Post-Operative Quality Improvement Survey of Patient Satisfaction Rates Following Mohs Surgery

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Mohs surgery is performed on 876,000 tumors per year.¹ The general method of closure following removal of these tumors involves suture material. Absorbable sutures have been used since as early as 1860.² They are commonly used during Mohs surgery for closure of skin and subcutaneous tissue. Non-absorbable sutures or staples are often used for closure of the most superficial layer of skin, however they require a follow-up visit in the clinic for removal. During the COVID-19 era, using absorbable sutures for all layers of skin has become popularized. The advantage to this technique is the elimination of a follow-up suture removal visit, thereby reducing patient exposure to COVID-19. Due to absorbable sutures increasing popularity it would be helpful to determine their satisfaction rates among patients.

An IRB exempt quality improvement survey was conducted with 38 patients who received a Mohs procedure and elected for simple interrupted superficial absorbable suture placement. Type of suture, type of repair, size of repair, location, age, and gender were recorded for each patient. A post-operative phone call was made to

these patients at weeks 2, 4, and 8 to gauge satisfaction rates across several parameters using Likert scale questions (Figure 1). These surveys were analyzed to determine patient satisfaction rates and their experience with absorbable sutures. The patients were asked to rate their cosmetic outcome, perception of decreased exposure to COVID-19 by eliminating suture removal appointment, comfort level on decreased post-operative visits/wound checks due to eliminating suture removal appointment, and their likelihood to opt for absorbable sutures in the future or recommend them to a friend/family (Figure 2).

1. On a scale of 1-5, how satisfied are you with the cosmetic outcome of your scar?				
1	2	3	4	5
Very dissatisfied		Neither satisfied nor dissatisfied		Very satisfied
2. Do you feel absorbable sutures protected you from exposure to COVID-19?				
1	2	3	4	5
Strongly disagree		Undecided		Strongly agree
3. On a scale of 1-5, how comfortable did you feel NOT coming back for a suture removal/wound check?				
1	2	3	4	5
Very uncomfortable		Neither comfortable nor uncomfortable		Very comfortable
4. On a scale of 1-5, how likely would you be to recommend absorbable sutures to a family/friend?				
1	2	3	4	5
Strongly unlikely		Undecided		Strongly likely
5. Would you personally opt for absorbable sutures again?				
1	2	3	4	5
Strongly disagree		Undecided		Strongly agree

Figure 1. Likert scale survey questions at post-operative weeks 2, 4, and 8.

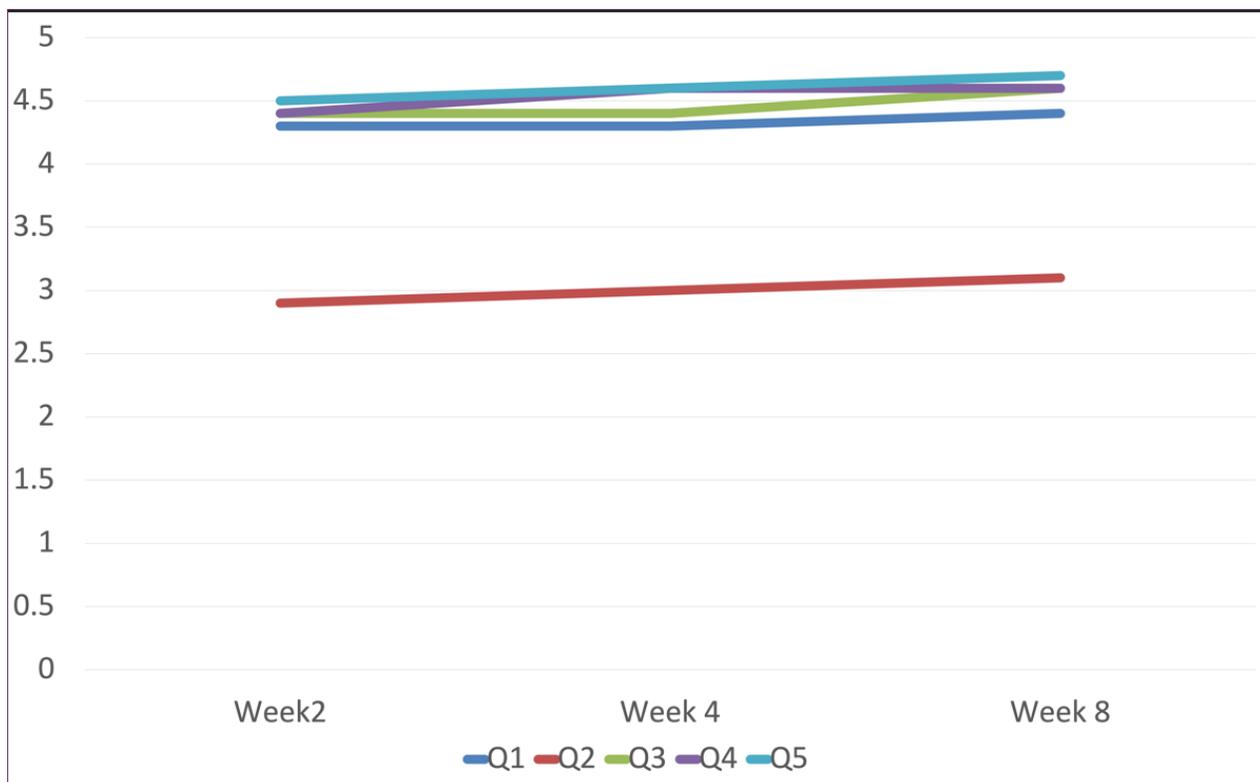


Figure 2. Mean patient scores for Likert scale questions (score of 1-5) across post-operative weeks 2, 4, and 8.

Absorbable sutures led to high patient satisfaction in terms of cosmetic outcome, comfort level without a suture removal appointment or wound check, and the likelihood to recommend them to a family/friend and opt for absorbable sutures again in the future. However, respondents did not feel the elimination of a follow-up suture removal visit reduced their exposure to COVID-19. Additionally, patients who had a repair with 5-0 plain gut suture answered consistently higher on Q1 (cosmetic outcome), Q4 (likelihood to recommend absorbable sutures to family/friend), and Q5 (likelihood of opting for absorbable sutures again in the future) than those who had repair with 3-0 or 4-0 chromic suture, and this difference was statistically significant ($p < 0.05$). Other parameters including type of repair, size of repair, location, age, and gender did not reveal any statistically significant correlation with Likert scale scores. Although patients did not feel the elimination of a suture removal appointment protected them from COVID-19, the data overall demonstrated favorable patient perceived outcomes regarding absorbable suture placement. This can be utilized in clinical practice and may be expanded upon in future studies. Absorbable surface sutures may be favored by patients who travel far distances for care or would prefer not to return for a follow-up appointment.

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