Absorbable Vs. Non-absorbable Sutures in Plastic and Dermatologic Surgery Procedures During the COVID-19 Pandemic: Which Would You Prefer?

Dear Sir,

The coronavirus disease 2019 (COVID-19) pandemic has necessitated a drastic reduction of access to the hospital facilities. In this scenario, it became necessary to optimize surgical procedures even in terms of reducing postoperative visits. The use of non-absorbable sutures (NAS) or absorbable sutures (AS) for the closure of skin surgical incision largely depends on the surgeon's preferences in the field of plastic surgery. Currently, there is no standard for using one type of suture over the other. However, the use of NAS requires an additional surgical examination for patients after discharge to remove stitches. This event implies a further access to the hospital, and it is associated with the exposure of patients to a risk of being infected with the SARS-CoV-2 or passing it to other patients.

We performed a literature review in search of studies that report the skin closure-related outcome following the use of AS or NAS. We identified some papers regarding the superiority of one type of suture over the other. These articles suggest that the use of AS material for the skin incision closure is non-inferior to NAS material regarding the rate of wound healing complications and aesthetic outcome of the scar. Data come essentially from general surgery and to our knowledge there are no other articles concerning plastic and aesthetic surgery.^[1-5]

For this purpose, from March 2020, at our plastic, reconstructive, and aesthetic surgery department, we started to use only absorbable stiches for patients. We have applied a dense layer of subcutaneous sutures and a subsequent total intradermal suture technique with inverting knots, using conventional monofilament stiches (e.g., Monocryl, Biosyn). In our experience, this procedure allows an easier post-operative patient's management, with an effective reduction of post-operative surgical wound complications and better aesthetic results, compared with the use of NAS. Most importantly, this approach has reduced the number of accesses in our unit and consequently the number of contacts between patients and physicians after discharge.

In a field where surgical suturing plays a key role, using materials capable of ensuring an optimal seal, with satisfactory aesthetic results while reducing risks for patients and medical staff, is mandatory for aesthetic and plastic surgery units as evidenced by our experience. The only exceptions to this approach are patients at high risk of developing wound complications or wounds sutured under excessive tension. A risk-benefit assessment has to be carried out in every patient in order to avoid controversial effects if a wound complication occurs necessitating operative management. We would recommend the predominant use of absorbable sutures for the closure of surgical site as a routine procedure in plastic, aesthetic, and dermatological surgery, during this challenging situation. Furthermore, it would be necessary to educate patients on home wound management.

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Conflicts of interest

There are no conflicts of interest.

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