



RESIDENT'S FORUM

RF - Mohs Micrographic Surgery: Same-Day or Delayed Reconstruction?*



FR - Cirugía micrográfica de Mohs. ¿Cierre inmediato o cierre diferido?

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KEYWORDS

Mohs surgery;
Same-day reconstruction;
Delayed reconstruction

PALABRAS CLAVE

Cirugía micrográfica de Mohs;
Cierre directo;
Cierre diferido

Mohs micrographic surgery (MMS) is considered the treatment of choice for skin cancer in at-risk skin areas or when the lesion is clinically poorly defined, as it provides cure rates higher than those of other therapeutic options and minimizes the removal of healthy peritumoral tissue¹. In Spain, the tumor most commonly operated using MMS is basal cell carcinoma, followed by squamous cell carcinoma; the most commonly used techniques are frozen-section MMS.

and flap reconstruction². Nevertheless, reconstruction of the defects caused by MMS often requires the use of different types of graft, the course of which may be affected by different factors, such as the size of the defect, sex, and time between surgery and repair of the defect. In fact, same-day reconstruction of the defect is not always possible, and a delaying reconstruction can benefit planning of the surgery, viability of the surgical bed, and blood supply to the wound margins. Some authors therefore recommend delayed reconstruction of those defects to improve graft survival, although the consequences of delaying the reconstruction technique are not yet fully understood. Delayed reconstruction is usual in tumors that require a delayed histologic evaluation of tissue samples fixed in formalin and set in paraffin. This is the case of squamous cell carcinoma, in which immune staining is required, essentially to rule out perineural infiltration, which is not uncommon.

In the debate on same-day or delayed reconstruction following MMS, 3 studies were recently published that analyze the rates of complications in patients who underwent delayed reconstruction after MMS with differing points of view³⁻⁵. One article links the delay in reconstruction to a higher number of postoperative complications, although this study includes a smaller number of analyzed defects³, whereas the other 2 articles found that delayed reconstruction was associated with a lower rate of postoperative complications^{4,5}.

* Please cite this article as: Montero-Vilchez T, Rodriguez-Tejero A, Tercedor-Sanchez J. FR - Cirugía micrográfica de Mohs. ¿Cierre inmediato o cierre diferido? Actas Dermosifiliogr. 2021;112:849-850.

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Patel et al³ performed a retrospective study of the postoperative complications of 342 patients in whom reconstruction of the defect following MMS was delayed for more than 24 hours. The authors found that a delay of more than 2 days was associated with an increase in complications, mainly infections. Nevertheless, only 4.5% of the defects were repaired with this much delay, and most delays were associated with more complex cases and larger defects. Thus, a higher rate of complications may be due to the characteristics of the defect and not to the length of delay in performing the reconstruction.

Miller et al⁴ performed a retrospective study of 633 defects repaired after MMS in 591 patients and found no link between the time to repair following MMS and surgical complications. The variables associated with increased postoperative risk were smoking, larger size and thickness of the defect, and the use of composite grafts, basically those that included cartilaginous tissue. Similarly, David et al⁵ evaluated the results of the reconstruction of 320 defects following MMS using total skin grafts or composite grafts. The mean interval for reconstructive surgery was 4.7 days. After performing a logistic regression analysis, those authors showed that late repair (defined as a delay of more than 6 days before reconstruction) had a protective effect against postoperative complications. Factors for a poor outcome found in that study were male sex and a larger defect size.

In conclusion, delayed reconstruction after MMS may be linked to a lower rate of postoperative complications and may therefore be especially recommended when the risk of

complications is higher, such as in smokers, in large defects, or when composite grafts are used.

Funding

This study has not received funding of any kind.

References

- Tolkachiov SN, Brodland DG, Coldiron BM, Fazio MJ, Hruza GJ, Roenigk RK, et al. Understanding Mohs micrographic surgery: a review and practical guide for the nondermatologist. *Mayo Clin Proc.* 2017;92:1261–71.
- de Eusebio Murillo E, Martín Fuentes A, Ruiz-Salas V, Garcés JR, Miñano Medrano R, López-Estebaranz JL. Characterization of surgical procedures in the Spanish Mohs Surgery Registry (REGES-MOHS) for 2013–2015. *Actas Dermosifiliogr.* 2017;108:836–43.
- Patel SA, Liu JJ, Murakami CS, Berg D, Akkina SR, Bhrany AD. Complication rates in delayed reconstruction of the head and neck after Mohs micrographic surgery. *JAMA Facial Plast Surg.* 2016;18:340–6.
- Miller MQ, David AP, McLean JE, Park SS, Christophel J. Association of Mohs reconstructive surgery timing with postoperative complications. *JAMA Facial Plast Surg.* 2018;20:122–7.
- David AP, Miller MQ, Park SS, Christophel JJ. Comparison of outcomes of early vs delayed graft reconstruction of Mohs micrographic surgery defects. *Jama Facial Plast Surg.* 2019;21:89–94.