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SLOW MOHS - A SURGICAL OPTION FOR TREATMENT OF SKIN CANCER IN HEAD AND NECK SURGERY

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Abstract: INTRODUCTION: Skin cancer in the head and neck presents a high risk of recurrence, for this reason the surgical technique that allows accurate histopathological evaluation is the "Peripheral and Deep in Face Margin Assessment (PDEMA)" or Slow Mohs.
REPORT: Male patient, 62 years old, with no history of smoking or alcohol consumption, with a history of kidney transplantation and subsequent incidence of skin tumors, presented to the Integrated Head and Neck Surgery Center of Florianópolis-SC (NICAP) with carcinoma 2.0cm squamous cell on the dorsum of the left nasal wall ulcerated over hemangioma, deep vascular congestion, papular and nodular rough appearance with a reddish appearance. Second lesion on the scalp, left midfrontal region measuring 2.0cm. Resection and mapping of the surgical area were performed, after 7 days the margin was expanded due to the presence of neoplastic tissue followed by reconstruction with a mid-frontal flap. After 18 days, the flap was transected and the pedicle was removed. After 55 days, the scar was corrected. No neoplastic tissues were found, so we chose not to proceed with radiotherapy.
DISCUSSION: Techniques such as PDEMA/ Slow Mohs are considered the gold standard in the treatment of high-risk skin cancer. Therefore, a viable, safe and easy option, requiring only coordinated work with a pathologist to demarcate the margins.
CONCLUSION: We used the PDEMA/Slow Mohs technique due to the prediction of bleeding from the hemangioma and greater difficulty in evaluating tissue margins, thus guaranteeing total resection of the tumor and subsequently a safe complex reconstruction, with no need for margin enlargement after reconstruction.

INTRODUCTION

According to the guidelines of the "*National Comprehensive Cancer Network* (NCCN)", Skin cancer in the head and neck region is always high risk. Due to the high risk of recurrence and the delicate location, they require different treatment. (1–3). One of the proposed forms of treatment is the concept of "Peripheral and Deep en Face Margin Assessment (PDEMA)". This technique, also called slow micrographic surgery or Slow Mohs, is a modified method of the classic technique and allows a complete histopathological evaluation (100% analysis) and more precise margins using samples processed in paraffin (1). Although it does not allow reconstruction in a single step, it has a high disease control rate (2,4,5). It is a technique that can be performed by any head and neck surgeon accompanied by a pathologist who are working in coordination to obtain an accurate result from the tissues analyzed, bringing better results like the one described in this report. (2).

OBJECTIVE

To present a surgical technique for treating skin cancer in the head and neck region using the PDEMA/Slow Mohs technique.

CASE REPORT

Male patient, 62 years old, with no history of smoking or alcohol consumption. He has a history of several skin tumors that appeared after a kidney transplant in 2014. The patient presented with an ulcerative-infiltrative lesion on the back and left nasal wall located over a congenital hemangioma, whose biopsy revealed a squamous cell carcinoma (SCC). At ectoscopy, the lesion showed deep vascular congestion, a rough papular and nodular appearance and a reddish appearance on the left side of the face and within it, an ulcerative-infiltrative lesion measuring 2.0 cm in diameter. He also presented a second scalp

lesion in the left midfrontal region measuring approximately 2.0 cm, suspected of recurrent SCC.

Surgery was performed using the PDEMA/Slow Mohs technique, requiring the removal of both lesions under general anesthesia, with mapping of the skin at the margins of the tumor and in the surgical bed, accompanied by a pathologist, who proceeded with the collection and processing of the fabrics. For greater accuracy of histopathological results, the bed remained open until the pathology results were obtained within 48 hours. The scalp lesion presented free peripheral and deep margins and the lesion in the nasal region presented a compromised deep margin and free peripheral margins. After 48 hours, the nasal lesion was reopened again to enlarge the deep margin, which was free in the anatomopathological evaluation after 48 hours.

Seven days after the first surgery, nasal reconstruction was performed with a mid-frontal flap. For the scalp injury, secondary intention healing was chosen with round block stitches".

After 3 weeks, transection of the mid-frontal flap pedicle was performed and scar correction.

After 2 months, the scar was touched up and the flap thinned, removing excess subcutaneous tissue to provide better aesthetics.

DISCUSSION

In the case in question, this technique was chosen due to the prediction of bleeding from the hemangioma and the difficulty in correctly evaluating the frozen margins interspersed with the hemangioma.

Micrographic techniques are considered the gold standard in the treatment of high-risk skin cancer as they evaluate 100% of the margins and not just a sample of 3 to 5% of the margins as in the traditional "*bread loaf*" analysis technique (3). The PDEMA/Slow Mohs technique is a viable, safe and easy-to-perform option for those who do not have classic Mohs surgery in their service. Only coordinated work with pathology is required to correctly map and demarcate the margins, without requiring any differentiated structure or training. Mohs Surgery, on the contrary, requires training and an adequate physical structure with a laboratory and trained professionals.

CONCLUSION

It was decided to use the PDEMA/Slow Mohs technique for better histopathological analysis of the margins, ensuring that the entire tumor was completely resected and carrying out a safe complex reconstruction, making sure that there would be no need for margin enlargement after reconstruction.

Squamous cell carcinoma under hemangioma

Surgery with the PDEMA/Slow Mohs

Nasal reconstruction mid-frontal flap

Result 3 months postoperatively

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