

Iterative Excision in the Surgical Treatment of Scar Areas in Marrakech: About 33 Cases

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Abstract

Original Research Article

Summary: The scarred areas pose the problem of their management. **Aim:** Show the importance of iterative excisions in the surgical management of scarred areas. This paper presents a prospective study carried out during a humanitarian campaign within the maxillofacial surgery department of the CHU Mohammed VI on the management of scars, during which we identified 33 cases of scarred areas treated by iterative excision. The sample was predominantly male, with a sex ratio of 2.3 and an average age of 26.9 years (extremes 6 – 58 years). Scarred areas were secondary to self-mutilation in 54.5% of cases and were located on the forearms in 36.7% of cases. All patients underwent iterative excision using spindle or W-shaped excision, with favorable outcomes. Iterative excision is a proven surgical procedure in the management of giant nevi. Here, we demonstrate the contribution of this technique in the management of scarred areas.

Keywords: Iterative excision, scar area, surgical procedure, good result.

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INTRODUCTION

The scarred areas have an aesthetic, psychological and even social impact. They pose the thorny problem of their repair with increasingly demanding expectations on the part of patients.

Iterative excisions are a surgical procedure based on the principle of progressive skin expansion between 2 operating times. It consists of performing repeated excisions of a lesion at variable time intervals allowing the surrounding healthy skin to expand [1]. This surgical procedure has proven its effectiveness in the treatment of certain pathologies such as the giant nevus [2]. However, this technique has other indications, in particular the treatment of scarred areas and extensive burn sequelae [1].

Thus, we proposed to carry out this study in order to show the place of iterative excisions in the management of scarred areas in Marrakech.

MATERIALS AND METHODS

This descriptive and prospective study was carried out during the campaign "The Winter Maxillofacial Surgery in Marrakech" from November 4

to 8, 2021, in the Department of Stomatology and Maxillofacial Surgery of the CHU Mohammed VI in Marrakech.

This study made it possible to include 33 patients followed in our training for scarring of various etiologies, having benefited from iterative excisions. All the patients who didn't show up during the follow-up period were excluded.

Our study parameters were epidemiological (age, sex, geographical origin), clinical (consultation time, etiology, site, coloration, extent, appearance), therapeutic (therapeutic process, result, immediate complications) and evolutionary (sequelae, patient satisfaction). patient).

RESULTS

During this scar campaign, we registered a total of 350 patients. 33 patients were taken care of for scarred areas and benefited from iterative excisions. The average age was 26.9 years (extremes ranging from 6 to 58 years) and the sex ratio was 2.3. The origin was urban in 80% of cases.

The etiologies of these scars were varied: self-mutilation (54.5%), AVP (27.2%), aggression (9.3%), accident at work (9.3%).

Clinically, the average consultation time was 9.9 years. The scars were of the stepped scarification type in 54.5% and of isolated scarring in 45.5%. They were located in the forearms (36.3%), arms (27.2%), cheek (27.2%), labial region (9.1%) and temporal region (9.1%).

All patients benefited from a first stage of iterative excision of the scar under local anesthesia, according to spindle excision in 63.6% and W-plasty in 36.4% of cases. Partial excision of the scar was assessed according to the elasticity of the surrounding skin and was performed in such a way that allows direct closure by sutures.

Our patients were regularly followed up with dressings on D5, D10 and D15. The sutures were removed on D10 for the scars on the face and on D15 for the scars on the limbs. We observed 2 cases (6.1%) of complications such as superinfection of the operating site with loosening of the sutures, for which we carried out daily dressings, antibiotic treatment and we left them in controlled healing. The evolution was satisfactory after an average of 15 days.

After one month of follow-up after removal of the sutures, the evolution was favorable, our patients were satisfied with the result.

A 2nd operation is planned within 3 months after the 1st operation in order to achieve excision of the scar, depending on the elasticity of the surrounding skin.



Fig 1: Right temporal alopecic scar area



Fig 2: Intraoperative result after 1st stage of iterative spindle resection



Fig 3: Staged scarifications by self-mutilation of the forearm



Fig 4: Result on the operating table after the first iterative excision phase following a W-plasty

DISCUSSION

Iterative excision consists of partial excision of the scar in several operating stages with progressive reduction of the scar surface until complete excision is obtained. The principle of iterative excision is based on progressive skin expansion between 2 operating times. The ultimate goal is to obtain a discreet scar, well oriented (if possible) or less troublesome [3]. The layout and the arrangement of the 1st excision then of the 1st scar is important, because the final result will follow from it. It is already necessary to have in mind a very precise plan and the plan of care until the final scar. This could then be supported or improved by other processes (lasers).

Iterative excision is involved in several indications, in particular extensive scarring areas and giant naevi [4]. However, it is limited to areas of reduced elasticity with fixed points (umbilicus, nipple) and perio-orifice areas.

Iterative excision has many advantages such as the fact that the operative gestures can take place under local anesthesia, each operative gesture is quick and easy to perform, it allows a temporary repair which does not cut the bridges to a subsequent repair, and the postoperative course is generally simple.

In addition, certain constraints are imposed, in particular the need for several operating procedures and the long duration of treatment. It is then necessary to

ensure that the patient adheres well to the treatment plan.

Iterative excision, subject to a few conditions, gives satisfactory results in the management of scarred patches.

CONCLUSION

Iterative excisions are a real option in the management of scarred areas, at the cost of good indication and patient motivation. The results are good, and can still be improved by other methods.

Declaration of Interests: The authors declare that they have no conflicts of interest in relation to this article.

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