Treatment of ingrown nail: comparison of recurrence rates between the nail matrix phenolization classical technique and phenolization associated with nail matrix curettage - is the association necessary? *

Tratamento da unha encravada: comparação da taxa de cura entre a técnica de fenolização clássica e a técnica de fenolização associada à curetagem da matriz ongueal – é necessária a associação?

Glaysson Tassara† Mônica Alberto Machado‡
Mabely Araújo Duarte Gouthier§

Abstract: Some services in Brazil combine curettage of the nail matrix with phenolization in the treatment of ingrown nails, with the objective of further increasing efficacy. The objective of this research was to compare the cure rates between the phenolization technique and phenolization associated with nail matrix curettage. A retrospective study was done which included 271 cases. There was only a 5% recurrence rate for the phenolization procedure, compared with 7.7% for combined phenolization/nail matrix curettage. There was no statistically significant difference between the two techniques, which indicated that there is no need for curettage of the nail matrix. Phenolization worked even for level III disease.

Keywords: Curettage; Nails; Nail diseases; Nails, ingrown; Phenol

Resumo: No Brasil, alguns serviços associam a curetagem da matriz ungueal à fenolização, como tentativa de aumentar a eficácia do tratamento da unha encravada. O objetivo deste trabalho foi comparar a taxa de cura entre a fenolização e a fenolização associada à curetagem da matriz. Foi realizado um estudo retrospectivo e incluídos 271 cantos encravados. Recorreram 5% após a realização da fenolização, e 7,7% após a fenolização com curetagem da matriz. Não houve diferença estatística entre as duas técnicas, mostrando não ser necessária a associação com a curetagem da matriz. A fenolização mostrou-se eficiente mesmo para o grau III.

Palavras-chave: Curetagem; Doenças da unha; Fenol; Unhas; Unhas encravadas

Many techniques for the treatment of onychocryptosis are described on the medical literature; however there is evidence that the phenolization technique is the most efficient. †‡ In Brazil, Di Chiacchio is responsible for the dissemination of the technique. † However, in some services, phenolization is used in association with nail matrix curettage, in an attempt to reduce the recurrence rate.

During the period between 2000 and 2006, a revision of the patients with ingrown nail (286) treated with one of the two techniques: phenolization as the only treatment and phenolization associated with nail matrix curettage was performed. The objective was to compare the cure rates of both techniques. The comparison took into consideration the total of the treated patients (levels I, II and III), as well as only the...
patients with level III. Inclusion factors were patients who had ingrown nail, treated with the technique of phenolization. This way, 148 patients were selected, presenting with 271 ingrown corners. All the surgeries were performed by the same surgeon in a private clinic.

In a group of patients the phenolization (application of a tourniquet, partial avulsion of the affected corner, application of a probe soaked in 88% phenol, three consecutive times, for one minute, neutralization and removal of the tourniquet) was used as the only treatment, while on the other group, besides phenolization, the curettage of the matrix as an adjuvant method was used. The patients were evaluated on days 1, 21, 90 and 180 and two years after the operation. The patients were classified in terms of the level of the ingrown nail (levels I, II and III).

The statistical analysis used descriptive measures for the quantitative variables, and frequency distribution for the qualitative variables. Contingency tables were used for the association of the status of the ingrown nail (cure or recurrence), for the patients of the total sample and for the level III sample, with the technique variable (isolated phenolization and phenolization associated with curettage). The chi-square test was used to test the statistical significance of the association amongst the variables. In order to analyse the effect of the technique (isolated phenolization and phenolization associated with curettage) in relation to cure or recurrence of the ingrown nail the simple logistic regression method was used. For all the statistical tests used a level of significance of 5% (P < 0,05) was considered. The most updated version of the statistical software SPSS was used.

The results showed that, from the sample of 148 patients, 50.68% were female and 49.32% male. The age varied from 13 to 88 years and the average age was 35.59 years, with a standard deviation of 16.31 years. In terms of the level of the ingrown nail, most cases treated were classified as level III, in a total of 117 corners. The follow-up was two years, the recommended one in order to evaluate the cure.

<table>
<thead>
<tr>
<th>NAIL STATUS</th>
<th>TECHNIQUE</th>
<th>Total</th>
<th>P-value</th>
<th>Cure</th>
<th>Recurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Classic Phenol</td>
<td>171 (95%)</td>
<td>9 (5%)</td>
<td>180 (100%)</td>
<td>0.374</td>
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<td>Phenol &amp; Curettage</td>
<td>84 (92,3%)</td>
<td>7 (7,7%)</td>
<td>91 (100%)</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>255 (94,1%)</td>
<td>16 (5,9%)</td>
<td>271 (100%)</td>
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</tr>
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</table>

found (10%) was based in only one treatment. Despite not being the aim of this study, most of the patients who had recurrence were submitted to another treatment and were cured.

In conclusion, the phenolization of the nail matrix is efficient for the treatment of ingrown nail, including for advanced cases. It is an easy and quickly executed technique, promoting a post-operative with minimal pain and fast return to daily activities. The association of matrix curettage does not bring any advantage, as well as increasing the duration of the procedure.

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**REFERENCES**
