Original

#### **Authors:**

Nilton Gioia Di Chiacchio<sup>1</sup> Flávia Regina Ferreira<sup>2</sup> Samuel Henrique Mandelbaum<sup>3</sup> Nilton Di Chiacchio<sup>4</sup> Eckart Haneke<sup>5</sup>

- <sup>1</sup> Specialist Candidate in MOHS Surgery at the Hospital do Servidor Público Municipal de São Paulo (SP), Brazil.
- <sup>2</sup> Assistant Instructor III, Dermatology Discipline, Medicine Department, Universidade de Taubaté (UNITAU)— Taubaté (SP), Brazil.
- <sup>3</sup> Assistant Instructor, Dermatology Discipline, Medicine Department, Universidade de Taubaté (UNITAU) and Head of the Dermatology Service, Hospital Universitário de Taubaté (HUT).
- <sup>4</sup> Head of the Dermatology Department of the Hospital do Servidor Público Municipal de São Paulo.
- <sup>5</sup> MD, PhD, Consulting Professor of Dermatology, Dermatology Department, Inselspital, University of Bern, Switzerland; Consultant, Centro de Dermatologia Epidermis, Inst CUF, Porto, Portugal.

#### **Correspondence:**

Dr. Nilton Gioia Di Chiacchio Rua Machado Pedrosa, 370 02045-010 – São Paulo – SP Brazil E-mail: niltongioia@terra.com.br

Received on: 12 November 2012 Approved on: 26 May 2013

The present study was carried out at the Hospital Universitário de Taubaté (HUT)— Taubaté (SP), Brazil.

Financial support: None Conflict of interest: None

# Nail surgery: follow-up on cases conducted during a practical course of a Dermatological Meeting

Cirurgia das unhas. Seguimento de casos operados em curso prático realizado em Congresso Dermatológico

#### ABSTRACT

**Introduction:** Workshops are offered during Dermatological Meetings in order to teach surgical procedures, both live and in detail. Nevertheless, access to post-operative developments, as well as to the results obtained, are restricted to the physicians from the medical services responsible for organizing these events.

**Objective:** To assess, and make known, the progress and results of previously operated cases.

**Methods:** Eight patients with different pre-operative diagnoses were operated on the nail surgery workshop that occurred during the Brazilian dermatological meeting RADESP 2011, with a ninemonth follow up. The results were evaluated using photographs, taken every three months, by the surgeons responsible for the surgeries.

**Results:** Of the eight operated cases, two were considered as yielding satisfactory results (one with mild dystrophy of the nail plate and the other with time considered insufficient for better assessment), and five were deemed as cured. One case did not return for the follow-up visits.

**Conclusion:** Following up and presenting the post-operative development of these patients as well as publishing the responsible surgeons' evaluations, complements the knowledge acquired by the workshops' attendees, and that of other participants at the meetings.

Keywords: general surgery; nails; treatment outcome.

#### RESUMO

**Introdução:** Durante os Congressos de Dermatologia são ministrados cursos práticos com o intuito de ensinar, ao vivo e de forma detalhada, os procedimentos cirúrgicos. Porém, a evolução pós-operatória, bem como os resultados obtidos, ficam restritos aos médicos dos serviços responsáveis pela organização desses eventos.

**Objetivos:** avaliar a evolução e resultados dos casos operados tornando-os conhecidos. **Métodos:** Oito casos operados durante Congresso Dermatológico – RADESP 2011 - no curso de cirurgia da unha, com diferentes diagnósticos pré-operatórios seguidos por nove meses. Os resultados foram avaliados pelos cirurgiões responsáveis pelas cirurgias, por meio de fotos a cada três meses.

**Resultados:** Dos oito casos operados, dois foram considerados com resultados satisfatórios, sendo um com leve distrofia da placa e outro com tempo considerado insuficiente para melhor avaliação e cinco curados. Um caso não compareceu aos retornos. **Conclusão:** A apresentação do seguimento destes pacientes bem como a avaliação dos cirurgiões responsáveis complementa o conhecimento adquirido pelos participantes destes cursos como também aos demais congressistas.

Palavras-chave: cirurgia geral; unhas; resultado de tratamento..

## INTRODUCTION

In recent decades, annual meetings in the dermatologic field have attracted increased interest by offering pre-event practical surgical workshops-initially hands-on, currently only observational. These courses last at least one full day and cover the vast majority of subjects in surgical dermatology. Typically, a local university medical school accredited by the Brazilian Society of Dermatology takes responsibility for the organization of such courses, including the selection and monitoring of participant patients. Both Brazilian and foreign-renowned physician professors actively take part, performing surgical procedures. Diagnoses, indications, and surgical planning are discussed with attendees during the courses. The surgeries are presented step-by-step, with attendees being allowed to ask questions during the procedures. Participant patients are seen, assessed, and guided throughout the post-operative period by monitors appointed by the medical school in charge. The data gathered during the post-operative follow up, as well as the final outcome of those procedures, is brought to the knowledge of course attendees later on. In this manner, the authors have evaluated and monitored participant patients who underwent surgical procedures in a practical course held at a dermatological annual meeting, making the developments and outcomes available, and completing the learning cycle of attendants.

## **METHODS**

A prospective observational study was conducted at the Hospital Universitário de Taubaté (SP), Brazil. Eight previously selected patients for the pre-event practical nail surgery course (2011 Annual Meeting of the Brazilian State of São Paulo's Dermatologists—RADESP) were followed up with for nine months. The course was coordinated by Prof. Eckart Haneke (Germany) and Prof. Nilton Di Chiacchio (Brazil). All patients were contacted, having consented to the publication of data and photographs. Those who did not attend the return visits were excluded from the final results. Previous diagnoses and techniques used are described in Table 1. The patients were evaluated post-operatively by the responsible medical school's care service at monthly intervals and photographed every three months. With nine months of follow-up, the photographs were sent to the instructors responsible for the surgical procedures carried out during the courses, who then issued their opinions and comments on the outcomes.

## RESULTS

Of the eight case surgeries conducted, only one (melanonychia) did not attend the return visit and therefore was excluded.

The outcome of Case 1 (transverse hyper-curvature of the nail) was deemed satisfactory up until the present article was written.<sup>1,2</sup> According to the surgeons responsible for the procedure, the nail plate will still grow, however will remain narrower when compared to the contralateral hallux. This outcome is expected in hypercurvature surgeries, where the main goal is pain relief and, secondarily, aesthetic improvement.

Cases 2 to 6 (ingrown toenail Grades 1 and 3,<sup>1,3</sup> subungual exostosis,<sup>1,4</sup> chronic paronychia<sup>1,5</sup> and fibrokeratoma,<sup>1</sup> respectively) were deemed cured with excellent aesthetic results.

In Case 7 (melanonychia),<sup>6</sup> the responsible surgeons verified the occurrence of a limited nail dystrophy, justified by the necessity of removing a great portion of the nail matrix, due to the size of the lesion. According to the surgeons, tangential excision of the matrix is aimed at decreasing or avoiding completely the undesirable dystrophy of the nail plate, which is common in the previously used techniques of elyptical excisions or when employing a punch. In Case 7, the resulting dystrophy had been considered acceptable thus far, for as the nail plate grows, the dystrophy may still be replaced by a normal plate (Figures 1 to 3).

# DISCUSSION

Practical courses taught during dermatological events impart knowledge to the attendees, who have direct contact with the conditions that occur most frequently in practices, and have the opportunity to discuss the best course of treatment. Surgical techniques are presented and discussed, providing access to details and knowledge that are not usually described in textbooks. Thus, attendees who are inexperienced in the subject have the opportunity for a first contact with the procedure, and experienced practitioners have the opportunity to enhance their expertise.

The post-operative follow-up is of paramount importance for the success of the surgical procedure. Depending on

TABLE 1: Identification of patient, ungual condition, and surgery procedure performed				
	Gender	Age	Ungual condition	SURGERY PERFORMED
CASE 1	Female	50	Transverse hypercurvature of the nail – pincer nail	Haneke's technique
CASE 2	Female	64	Ingrown nail Grade 1	phenolization of nail matrix
CASE 3	Female	28	Ingrown nail Grade 3	phenolization of nail matrix and Dubois
CASE 4	Male	22	subungual exostosis	Osteotomy
CASE 5	Female	48	chronic paronychia	excision of the proximal nail fold
CASE 6	Female	58	Digital Fibrokeratoma	excision
CASE 7	Female	68	melanonychia	Tangential excision
Case 8	Female	60	melanonychia	Tangential excision



FIGURE 1: Cases 1, 2 and 3. Nine month follow up



FIGURE 2: Cases 4 and 5. Nine month follow up

the procedure used, the duration of the post-operative period can vary and complications might occur that the doctor must know how to handle. In the pre-event courses, the post-operative development of participant patients is usually not followed up, leading to the existence of an important gap in the learning of the attendees.

The present paper evaluated the 9-month post-operative period of patients operated for the correction of complex conditions that compromised the nail apparatus, submitting the outcomes to the responsible surgeons, who in turn evaluated and commented on the results. In this manner, not only course attendees but also the wider community of dermatologists can have access to the continuity of relevant surgical procedures, further enhancing their knowledge.

Based on the outcomes off the seven cases that reached the end of the pre-determined post-operative follow up, all were considered cured—with some reservations about the necessity of a longer follow up period. Photographic documentation can be considered crucial for monitoring the post-operative development and verifying outcomes.

# CONCLUSION

The surgical outcomes of the pre-event course studied in the present paper showed good results. Monitoring the devel-



**FIGURE- 3:** Cases 6 and 7. Nine month follow up

opment of participant patients, and making both the follow-up data and the responsible surgeons' evaluations available complements the knowledge gained by course attendees and the wider dermatologic community.

Development data and outcomes of other pre-event courses should also be made available for the same purpose.

#### REFERENCES

- 1. Richert B, Di Chiacchio N, Haneke E. Cirurgia da unha. Rio de Janeiro: Di Livros; 2012.
- 2. Baran R, Haneke E, Richert B. Pincer nails: definition and surgical treatment. Dermatol Surg. 2001;27(3):261–6.
- Di Chiacchio N, Belda W Jr, Di Chiacchio NG, Kezam Gabriel FV, de Farias DC.Nail matrix phenolization for treatment of ingrowing nail: technique report and recurrence rate of 267 surgeries. Dermatol Surg. 2010;36(4):534-7.
- Haneke E. Bone and cartilage tumors. In: Krull EA, Zook EG, Baran R. editors. Nail Surgery. A Text and Atlas. New York: Lippincott Willians& Willians; 2001. p. 287–91.
- Di Chiacchio N, Debs EAF, Tassara G. Tratamento cirúrgico da paroníquia crônica. Estudo comparativo de 138 cirurgias utilizando duas técnicas diferentes. Surg Cosmet Dermatol. 2009;1(1):21-4.
- Reppert SM. Circadian rhythms: basic aspects and pediatric implications. In: Styne DM, Brook CGD, editors. Current concepts in pediatric endocrinology. New York: Elsevier; 1987. p. 91-125.