

Congenital melanocytic nevi management: answer

Stefania Guida¹, Giacomo Giovanni Urtis², Giuseppe Rubino², Giovanni Pellacani¹, Francesca Farnetani¹

¹Dermatology Unit, University of Modena and Reggio Emilia, Modena, Italy

²Istituto DermoEstetico (IDE), Milan, Italy

The questions can be found in the following article:

Guida S, Urtis GG, Rubino G, Pellacani G, Farnetani F. Congenital melanocytic nevi management: question. J Pediatr Neonat Individual Med. 2016;5(1):e050127. doi: 10.7363/050127.

Keywords

Melanocytic nevi, congenital nevi, melanoma, management.

Corresponding author

Stefania Guida, Dermatology Unit, University of Modena and Reggio Emilia, Modena, Italy; email: stefania.guida@alice.it.

How to cite

Guida S, Urtis GG, Rubino G, Pellacani G, Farnetani F. Congenital melanocytic nevi management: answer. J Pediatr Neonat Individual Med. 2016;5(1):e050128. doi: 10.7363/050128.

Answers

1. Treatment of congenital melanocytic nevi (CMN) is taken into account above all for cosmetic reasons. The probability to develop a cutaneous malignant melanoma is low.
2. Full- and partial-thickness procedures can be considered, depending on the size of the lesion and potential results.
3. The approach depends on several factors: characteristics (signs of malignancy, size) and location of the lesion, the will and the age of the patient. Some authors recommend the treatment between 2 and 5 years of age but no better outcomes with early intervention have been proven.

Introduction

CMN are melanocytic lesions presenting at birth or appearing during the first weeks of life [1]. CMN are usually grouped, according to size, in three categories: 1) small congenital nevi (SCN), measuring less than 1.5 cm in greatest diameter; 2) intermediate congenital nevi (ICN) that are 1.5-19.9 cm in greatest diameter; 3) large or giant nevi, larger than 20 cm in greatest diameter [2]. Although the risk of a nevus evolving into a melanoma is low, all congenital nevi, particularly giant nevi, can be considered potential melanoma precursors [3, 4]. Furthermore, other criteria should be considered for an appropriate management of these lesions.

Management of congenital melanocytic nevi

CMN can be treated for cosmetic reasons when located in aesthetic areas [5].

Full- and partial-thickness procedures are available but the effectiveness of either strategy for preventing future malignancy remains controversial. Nevertheless, full-thickness excision improves cosmetic appearance for many SCN and ICN while partial-thickness removal approaches, such as dermabrasion or lasers, may be considered when more aggressive surgical procedures are not practicable [5].

Moreover, some authors recommend the treatment between 2 and 5 years of age but no better outcomes with early intervention have been proven [6]. Consequently, clinical monitoring and subsequent excision can be considered in order to

avoid general anesthesia, to prevent psychosocial consequences.

Discussion

We presented the case of a 12-year-old girl with a congenital melanocytic nevus on the face with greatest diameter of 2.5 cm.

The management of CMN can be challenging. Early and complete surgical excision of giant congenital nevi is advisable while the excision of SCN and ICN remains controversial. In fact, the probability of a melanoma arising in SCN and ICN is less than 1% of cases. This means that prophylactic removal of such lesions is not always necessary [7], although some exceptions can be considered. In fact, larger medium-sized CMN, as well as those with unusual features, those of great cosmetic concern or anxiety, and those that are not easy to follow-up can be subjected to surgical treatment [8-10].

Furthermore, Kruk-Jeromin et al. [11] found that nevi < 5 cm in diameter can be successfully excised with a single procedure with high rates of satisfaction, like in the case presented (**Fig. 1**).

Taking into account the size and the location on the face and consequent psychosocial factors, it was possible to consider the excision of the nevus in our case. This study underlines that every patient with a congenital melanocytic nevus needs a careful evaluation in order to guarantee a correct management.

Declaration of interest

The Authors declare that there is no conflict of interest.

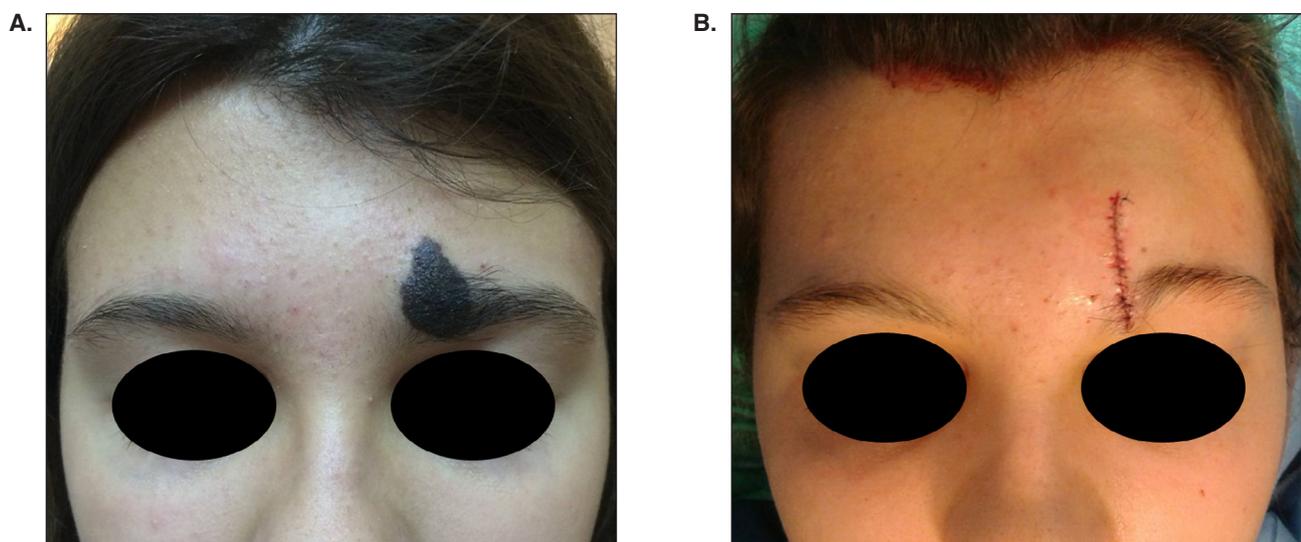


Figure 1. Clinical picture before (A) and after (B) the surgery.

References

1. Krengel S. Nevogenesis – new thoughts regarding a classical problem. *Am J Dermatopathol.* 2005;27:456-65.
2. Kopf AW, Bart RS, Hennessey P. Congenital nevocytic nevi and malignant melanomas. *J Am Acad Dermatol.* 1979;1:123-30.
3. Milano A, Bonifazi E. Congenital melanocytic nevus. Clinical and dermoscopic signs of malignancy. *Eur J Pediatr Dermatol.* 2012;22:135-43.
4. Richardson SK, Tannous ZS, Mihm MC. Congenital and infantile melanoma: review of the literature and report of an uncommon variant, pigment-synthesizing melanoma. *J Am Acad Dermatol.* 2002;47:77-90.
5. Ibrahimi OA, Alikhan A, Eisen DB. Congenital melanocytic nevi: where are we now? Part II. Treatment options and approach to treatment. *J Am Acad Dermatol.* 2012;67:515.e1-13.
6. Kinsler VA, Birley J, Atherton DJ. Great Ormond Street Hospital for Children registry for congenital melanocytic naevi: prospective study 1988-2007. Part 2 – evaluation of treatments. *Br J Dermatol.* 2009;160:387-92.
7. Tannous ZS, Mihm MC Jr, Sober AJ, Duncan LM. Congenital melanocytic nevi: clinical and histopathologic features, risk of melanoma, and clinical management. *J Am Acad Dermatol.* 2005;52:197-203.
8. Sahin S, Levin L, Kopf AW, Rao BK, Triola M, Koenig K, Huang C, Bart R. Risk of melanoma in medium-sized congenital melanocytic nevi: a follow-up study. *J Am Acad Dermatol.* 1998;39:428-33.
9. Stanganelli I, Ascierto P, Bono R, De Giorgi V, Pimpinelli N, Chiarion-Sileni V, Palmieri G, Pizzichetta MA, Testori A. Management of small and intermediate congenital nevi: a nationwide survey in Italy. *Dermatology.* 2013;226(Suppl 1):7-12.
10. Marghoob AA, Borrego JP, Halpern AC. Congenital melanocytic nevi: treatment modalities and management options. *Semin Cutan Med Surg.* 2007;26:231-40.
11. Kruk-Jeromin J, Lewandowicz E, Rykala J. Surgical treatment of pigmented melanocytic nevi depending upon their size and location. *Acta Chir Plast.* 1999;41:20-4.