





and in communities, has led to a consistent fall in the disease detection coefficient over the years, from 75.5 in 1990 to 11.07 in 2016.<sup>3</sup> However, it is a State that has the uniqueness of a reference center (Alfredo da Matta Foundation) being in charge of the Leprosy Control Program since its inception, with the deactivation of the isolation colony, which facilitates the execution of control activities by having a specialized and engaged team. Among these activities, the active search for cases in the communities is a priority strategy and, in recent years, has been done systematically, monthly, on a Saturday morning in the physical space of a school or health service, with the so-called dermatological care units, with a multidisciplinary team.<sup>4,5</sup> Thus, in the years 2015 to 2017, there were 62 joint efforts in the city of Manaus, the state capital, with 2,130,264 inhabitants, covering the six districts of the city (Figure 1), with a total of 12,617 leading to the diagnosis of 112 confirmed cases of leprosy, 40 (35.7%) paucibacillary and 72 (64.3%) multibacillary, representing 19.2% of the 582 new cases of leprosy detected and reported in Manaus, during the same period. This result points to the importance of the active search for cases in the diagnosis of leprosy as a strategy to reach a repressed demand, either by the difficulty of access or by the provision of health services. □

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**How to cite this article:** Santos M, Pedrosa VL, Pennini SN, Sousa FHC. Active search for cases of leprosy in the city of Manaus. *An Bras Dermatol*. 2018;93(6):931-2.

*An Bras Dermatol*. 2018;93(6):930-44.

## Assessing the efficacy of a 10-point referral tool in the triaging of pigmented lesions to a Dermatology clinic\*

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DOI: <http://dx.doi.org/10.1590/abd1806-4841.20188079>

Dear Editor,

Worldwide the incidence of melanoma is increasing faster than of any other cancer. Early detection is critical in reducing mortality and morbidity, and therefore general practitioners (GPs) need to be able to screen effectively between benign and suspicious lesions.<sup>1,2</sup> Interventions that improve the accuracy of secondary care triaging may be used to prioritize patients with malignant lesions and help combat the hindrances of long waiting times. GPs referring suspected melanomas to our department were asked to use a pro forma with an integrated 10-point Likert scoring tool and grade the likelihood of lesions being melanomas (1 least likely, 10 most likely). Based on results from a previous pilot study in our department, all patients referred with a score  $\geq 4$  were triaged to an urgent appointment and those with a score of  $\leq 3$  to a soon appointment. Our aim was to assess the usefulness of this proforma in discriminating between malignant melanomas (MM) and other pigmented lesions (NM). We retrospectively assessed the clinical records of all ( $n=75$ ) patients diagnosed with MM in 2016 who were referred using the above proforma and matched them with 75 consecutive NM patients. Two hundred patients with primary MM were diagnosed in our department in 2016, 75 (37.5%) of which with the above proforma. In the MM group 38 patients were male and 37 female, with a mean age of 59.8 years. In the NM group, 29 patients were male and 46 female, with a mean age of 48.4 years. Both groups had overlapping scores ranging from 1 - 10 (Figure 1). Median and mean scores in the MM group were 6 and 6.02. The NM group had a

Received 12 January 2018.

Accepted 16 March 2018.

\* Work conducted at the Department of Dermatology, NHS Lothian, Edinburgh, United Kingdom.  
Financial support: None.  
Conflict of interest: None.

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median score of 5, and mean of 4.78. There was no statistical difference between the two groups ( $p=0.97$ ). Forty-one MMs had Breslow thickness <1mm, 26 between 1-4mm, and eight >4mm. Of the 75 NM lesions, 32 represented benign naevi, 22 seborrheic keratoses, six were pigmented basal cell carcinomas, and 15 represented a mixture of other benign lesions (Figure 2). Using this proforma and based on a score of 4 as the cut-off, 78% of all NM lesions and only 80% of MMs would have been given an urgent appointment. Furthermore, adjusting the cut-off value would not improve the situation meaningfully. Based on earlier studies, 60-95% of GP referrals of lesions to UK dermatologists were benign, and GPs could only recognize 66.7% of all skin malignancies.<sup>3,4</sup> Taking the above into consideration, any triaging tool that is based on GP scoring is likely to be unsuccessful. Interestingly, recent developments in the field of artificial intelligence have shown promising results on the ability of computer programs to accurately recognize and classify cutaneous tumours.<sup>5</sup> Even though further research is required for such tools to be widely available, their potential for use on mobile devices may be key in augmenting the clinical decision-making of GPs and trans-

forming the referral process.<sup>5</sup> Until such programs become available it is hard to quantify the effort, resources, and time required to train GPs and the success of such an undertaking. We therefore argue that all suspicious pigmented lesions referred to secondary care be triaged as urgent. □

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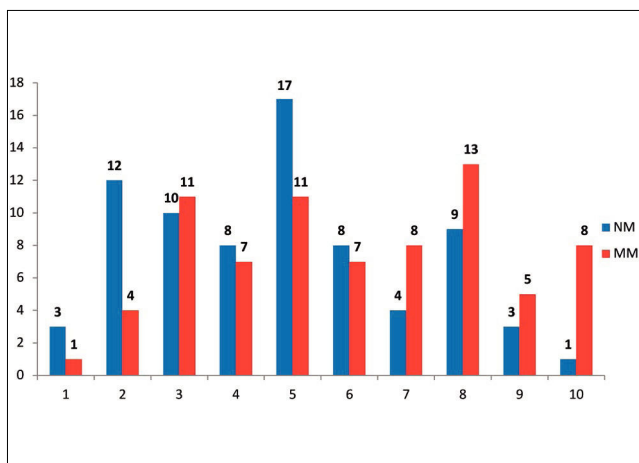


FIGURE 1: A summary of the scores used to refer both malignant melanoma (MM) and other pigmented lesions (NM)

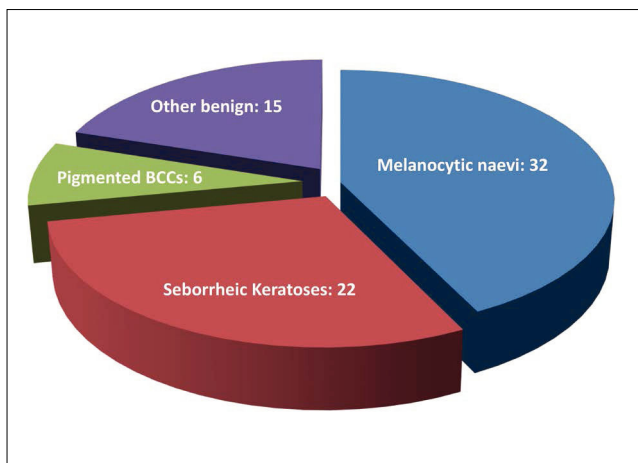


FIGURE 2: A summary of all the non-melanoma lesions that were referred using the proforma as suspected melanomas

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**How to cite this article:** Kravvas G, Ball SL, Naysmith L. Assessing the efficacy of a 10-point referral tool in the triaging of pigmented lesions to a Dermatology clinic. *An Bras Dermatol.* 2018;93(6):932-3.