Dermatology Practical & Conceptual

How to Combat Over, diagnosis of Melanoma

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The diagnostic criteria for melanoma have undergone significant changes over time, encompassing clinical, dermatoscopic, and histopathologic criteria [1]. It is undeniable that the increase in melanoma incidence can partly be attributed to changes in disease definitions and enhanced screening efforts. However, over-diagnosis of melanoma can be categorized into two types. The first involves incorrectly labeling nevi as melanomas through pathology, while the second pertains to overtreatment of flat, mostly non-invasive melanomas that progress slowly and pose no immediate harm if left untreated for an extended period. When discussing over-diagnosis of melanoma, it is crucial to specify which type is being referred to. The article by Betz-Stablein and Soyer addresses the second type and acknowledges it as a genuine concern [2]. On the other hand, Navarrete-Dechent and Lallas do not explicitly specify the type of over-diagnosis, but their arguments seem to encompass both types [3]. Interestingly, both articles propose similar solutions to combat over-diagnosis: the implementation of more technology. They suggest that sequential dermatoscopy, total body photography, and artificial intelligence-powered decision support can enhance specificity, thereby reducing the need for unnecessary excisions and subsequently decreasing over-diagnosis. While I agree that technology has the potential to decrease over-diagnosis, I believe it cannot effectively address both types. Misdiagnosis of nevi as melanomas by pathology can be reduced by minimizing unnecessary nevus excisions, but overtreatment of slowly progressing in situ melanomas like lentigo maligna cannot be adequately addressed by these measures. Sequential dermatoscopy and total body photography may even lead to an increased detection and treatment of in situ melanomas. This viewpoint aligns with Welch et al., who recently suggested a reduction in technology as a strategy against over-diagnosis [4]. Welch also recommended refraining from excising melanocytic lesions smaller than 6 mm to combat over-diagnosis. However, size alone is a crude and imperfect indicator of prognostic significance. For instance, lentigo maligna can grow to a large size while still maintaining an excellent prognosis. Conversely, some rapidly growing melanomas can be small in size yet exhibit increased thickness and a worse prognosis. The challenge lies in identifying reliable indicators that can guide the decision to leave certain melanomas untreated. This necessitates research combining clinical and dermatoscopic criteria with prognostic factors. To combat over-diagnosis, a conceptual shift is also required. Clinicians and pathologists should not be excessively concerned about missing thin melanomas or be driven by the fear of malpractice lawsuits resulting from

the oversight of non-invasive melanomas. Additionally, a policy shift is needed concerning incentives and oversight. As mentioned before, clinicians who perform an excessive number of biopsies to detect a single melanoma should have their reimbursements limited, and pathology labs with a disproportionately high number of melanoma diagnoses should have their slides reviewed by an expert panel. Implementing these measures requires the involvement of all stakeholders, including healthcare professionals, consumers, insurance agencies, and healthcare policymakers.

References

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