Weighing Re-excisions for Non-Melanoma Skin Cancers and Dysplastic Nevi

New reports about the potential benefit of re-excision highlight the distinctions between skin cancer and nevi.

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For many years a debate has persisted amongst dermatologists about when it is appropriate to re-excite non-melanoma skin cancer (NMSC) lesions as well as dysplastic nevi. While it is perhaps wiser to err on the side of safety, valid concerns over the costs of treatment give some reason for pause in certain situations. A new study has shed additional light on the relative clinical benefits of re-excising NMSCs and atypical moles in specific situations, offering a slightly different perspective and also perhaps instigating the start of a more nuanced understanding of the topic.

RESIDUAL NMSC AND DYSPLASTIC NEVI
In the recent study, authors examined the rate of residual basal and squamous cell carcinomas within excisional specimens after shave biopsy. The researchers retrospectively reviewed 439 consecutive cases that were sent to a single dermatopathology lab from a practitioner’s general dermatology office who also performs Mohs micrographic surgery. Of these, 100 cases had a histopathologically proven carcinoma on biopsy with subsequent excision, which the researchers analyzed for statistical associations between histopathologic type, location, age, sex, and time.

Results showed that 59.6 percent of BCCs had positive residuals, while 27.9 percent of SCCs had positive residuals. Thus, histologic type was significantly associated with residual carcinoma in excisional specimens, with basal cells being 2.13 times as likely to have residual carcinoma present. These percentages are quite a bit higher than those that have been reported in previous studies, suggesting that re-excision after shave biopsies may be justified in most cases. While the study was small, the implications are potentially significant. If residual lesions are left behind in the initial excision at similar rates to those suggested by the authors of this study, there is absolutely a need to re-excite a lesion.

However, while these findings may be relevant in specific instances of shave biopsies for SCCs and BCCs, it’s more difficult to project a broader set of rules regarding re-excision for suspicious nevi. More pointedly, a 2010 study suggests that the re-excision of dysplastic nevi (DN) may not be particularly worthwhile. The purpose of the study, according to the authors, was to determine the recurrence rates of previously biopsied DN and to assess whether biopsy method, margin involvement, congenital features, epidermal location, and degree of dysplasia are associated with recurrence. They assessed 271 nevus biopsy sites and found that of the 195 DN with greater than two years of follow-up, just
seven (or 3.6 percent) demonstrated recurrence on clinical examination. In total, 98 DN had a follow-up period of at least four years with no clinical recurrence, the authors observed. Moreover, of 61 benign nevus biopsy sites examined, clinical recurrence was observed in just 3.3 percent of cases. Importantly, recurrence was significantly associated with shave biopsy technique for all nevi but not with nevus dysplasia or subtype, or the presence of positive margin or congenital features.

An Australian study published last year came up with similar findings. Its authors reviewed a pathology database for nevi undergoing biopsy with a minimum five years follow-up. They found that 26 percent of nevi had a positive margin, more common in shave and punch than ellipse biopsied lesions. Three cases recurred, requiring re-excision resulting in a pathology recurrence rate of 0.3 percent. These cases showed benign changes and two were originally excised with clear margins.

Given the extremely low rates of clinical recurrence after biopsy of DN and benign nevi in these studies, re-excision of nevi—including mildly to moderately DN with a positive margin—may not be necessary.

CONCLUSION
That the rate of residual skin cancer appears to be high after a shave biopsy offers some assurance that it is better to be safe when it comes to suspicious-looking lesions. While re-excision of SCCs and BCCs seems ever more reliable, the question of moles is debatable. In fact, the disparity that appears to exist between nevi and skin cancer that is articulated in the studies also underscores the fine line between the two.

With compelling data suggesting the need for more attention and study, future research will hopefully elucidate the questions remaining regarding the benefit of re-excision in specific situations. However, one critical point that these data implicitly articulate is about importance of a strong relationship between dermatologists and dermatopathologists. Detection and diagnosis remain the cornerstones of effective management of skin cancer, thus the expertise of dermatopathologists is key for distinguishing appropriate lesions for re-excision.

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