MELANOMA AND MELANOCYTIC NAEVI

# ATYPICAL INTRAEPIDERMAL MELANOCYTIC PROLIFERATIONS: OUTCOMES OF SURGICAL EXCISION AND MANAGEMENT CONSIDERATIONS

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Introduction: Atypical intraepidermal melanocytic proliferation (AIMP) is a descriptive term used to denote morphology sharing features with melanoma but failing to meet a benign or malignant diagnosis. Few studies have evaluated the excisional outcomes of AIMP and the rate of diagnostic change to melanoma.

Objective: Evaluate the outcomes of surgical excision of biopsy-proven AIMP and melanoma diagnosis and identify potential risk factors for upstage to melanoma.

Materials and Methods: With IRB approval, a retrospective chart review was performed for all cases of AIMP diagnosed between January 1992- July 2016. AIMP with features “consistent with melanoma in situ” were excluded. All lesions were treated with excision and pathology. Initial biopsy reports, clinical records, excision reports, and final pathology were reviewed.

Results: 1,127 lesions diagnosed as AIMP were reviewed. The mean patient age was 56 years (7-93), with 58% female. Average clinical lesion size was 6.6mm (1-50mm). Locations included trunk/extremity (827, 73.4%), head/neck (192, 17%), hand/foot (87, 7.7%), nail (12, 1.1%), and genitalia (9, 0.8%).
Upstage to melanoma occurred in 8.1% of AIMP (92) following conventional excision; 93% were melanoma in situ (86) and 7% invasive melanoma (6). Features associated with change to melanoma included head or neck (21.9%); initial punch biopsy (15.2%), 9.1% for shave or 2.0% for excisional biopsy; partial biopsy (33.6%) vs. 4.4% for full biopsy; if melanoma was in the differential (14.3%) compared with “least likely”/no mention of melanoma (4.0%); and deep or deep/lateral margin involvement of the biopsy (16.1%) vs 1.3% when no margins were involved.

Conclusion: AIMP carries a significant risk for upstaging to melanoma upon conventional excision. Head and neck location, partially sampled, or with histologic features extending to the biopsy margin, were significant factors. Clinical-pathologic correlation, further sampling

of partially-biopsied lesions or treatment with a staged surgical technique may help identify occult melanoma.