Actinic Keratoses Follow Regress, Recur Pattern

BY KATE JOHNSON

MONTREAL — Actinic keratoses are dynamic lesions and their expression varies over time, based on the results of an 11-month study of the natural course of the lesions in people with extensive actinic damage.

“At any one time, less than half of the lesions are evident clinically,” said Dr. Craig Elmets, who reported his findings at the annual meeting of the Society for Investigative Dermatology.

The pattern of regression and recurrence of actinic keratoses (AK) has implications for the treatment of the lesions, said Dr. Elmets, professor and chair of the department of dermatology and director of the Skin Disease Research Center at the University of Alabama, Birmingham.

“If one is going to treat individual lesions, then they need to be treated aggressively because at any one time only a minority of the [visible] AKs are present.’”

The study followed AK lesions for 11 months in 26 individuals with extensive actinic damage. At baseline, the subjects had 10-40 actinic lesions and at least one prior histological diagnosis of an AK or a non-melanoma skin cancer.

“The subjects’ AKs were mapped at baseline and again at 3, 6, 9, and 11 months. The lesions also were biopsied at baseline and the end of the study. ‘If a lesion that had been selected for biopsy was no longer present clinically, the site where it had been was still biopsied,’ Dr. Elmets explained.

At baseline, there were a total of 610 AKs in the study group (mean 23.5 per individual). At the end of the study, this number was not significantly different despite the development of 973 new lesions over the 11-month period. About 40% of the lesions present at baseline had regressed by month 11, and nearly 200 of the lesions that were present at baseline regressed and then reurred, he said. ‘A total of 31 of the lesions regressed twice.’

Using a histologic grading scheme that was based on a cervical dysplasia model, Dr. Elmets noted little progression in the severity of lesions in terms of proliferative, atypia, or both features. ‘The histologic appearance seems to actually correlate very closely with the clinical appearance, and over the course of 11 months there was little evidence of histologic progression.’

AKs have been thought to be precursors to squamous cell carcinomas in some cases. The presence of AKs is strongly predictive of individuals who are at risk for basal cell and squamous cell carcinomas, noted Dr. Elmets.

The study followed AK lesions for 11 months in 26 individuals with extensive actinic damage. At baseline, the subjects had 10-40 actinic lesions and at least one prior histological diagnosis of an AK or a non-melanoma skin cancer.

“The subjects’ AKs were mapped at baseline and again at 3, 6, 9, and 11 months. The lesions also were biopsied at baseline and the end of the study. ‘If a lesion that had been selected for biopsy was no longer present clinically, the site where it had been was still biopsied,’ Dr. Elmets explained.

At baseline, there were a total of 610 AKs in the study group (mean 23.5 per individual). At the end of the study, this number was not significantly different despite the development of 973 new lesions over the 11-month period. About 40% of the lesions present at baseline had regressed by month 11, and nearly 200 of the lesions that were present at baseline regressed and then reurred, he said. ‘A total of 31 of the lesions regressed twice.’

Using a histologic grading scheme that was based on a cervical dysplasia model, Dr. Elmets noted little progression in the severity of lesions in terms of proliferative, atypia, or both features. ‘The histologic appearance seems to actually correlate very closely with the clinical appearance, and over the course of 11 months there was little evidence of histologic progression.’

AKs have been thought to be precursors to squamous cell carcinomas in some cases. The presence of AKs is strongly predictive of individuals who are at risk for basal cell and squamous cell carcinomas, noted Dr. Elmets.

The pattern of regression and recurrence of actinic keratoses may have implications for the treatment of the lesions.