

Laser removal may be advantageous for treating precancerous skin lesions

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Carbon dioxide laser ablation (removal) may have a role as an alternative treatment for a common precancerous skin lesion known as lentigo maligna when surgery or radiation therapy is not feasible, according to a report in the November/December issue of the *Archives of Facial Plastic Surgery*.

According to background information in the article, lentigo maligna (LM) is a common premalignant skin lesion typically seen in older populations with a history of chronic [sun damage](#) and it is commonly located in the head and neck region. The lesion may progress to LM melanoma (LMM), which has the same prognosis as other forms of [melanoma](#).

Haemi Lee, M.D., and colleagues at the University of Western Ontario, London, Ontario, Canada, conducted a retrospective case series review of all patients with primary lentigo maligna diagnosed and treated in London, Ontario between July 2, 1991 and June 29, 2010. The researchers assessed outcomes in managing primary LM through surgical excision (removal), radiation therapy, and [carbon dioxide laser](#) ablation. The carbon dioxide laser exerts its effect on tissue by vaporization of water-containing cells.

Among 73 patients ages 39 to 93 years who chose treatment, 27 were treated with surgical excision, 31 were treated with radiation therapy, and 15 were treated with carbon dioxide [laser ablation](#). The patients were followed an average of 16.6 months for surgical excision, 46.3

months for radiation therapy, and 77.8 months for carbon dioxide laser ablation.

"A trend toward lower recurrence rates with surgical excision and carbon dioxide laser ablation was identified, but the results were not statistically significant," the authors report.

The recurrence rates were 4.2 percent for surgical excision, 29 percent for [radiation therapy](#), and 6.7 percent for carbon dioxide laser ablation.

"Although surgical excision is established as the gold standard of LM and LMM treatment, complete excision is not always feasible in large lesions of the head and neck," the authors write. "The decision to perform complete excision in the setting of LM, a non-invasive disease, must weigh the benefits of excision against the morbidity of the procedure."

"Carbon dioxide laser ablation may be advantageous because it treats large lesions in cosmetically sensitive regions of the head and neck in a short period, with minimal morbidity," they conclude.

More information: *Arch Facial Plast Surg.* 2011;13[6]:398-403.

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