Intralesional Corticosteroids for Long-term Control of Primary Cutaneous Marginal Zone Lymphoma without systemic involvement

Pragya Tiwari, John Hall, Anand Rajpara, Carol Stanford, and Daniel Aires

Author Affiliations
Pragya Tiwari (Ravindra Nath Tagore Medical College, Udaipur, India)
John Hall (St. Luke's Hospital, University of Missouri, Kansas)
Anand Rajpara (University of Kansas Medical Centre, Kansas City)
Daniel Aires (University of Kansas Medical Centre, Kansas City)
Carol Stanford (University of Missouri, Kansas)

Corresponding Author
Pragya Tiwari MBBS
Ravindra Nath Tagore Medical College
Udaipur, India
Email: pragya.tiwari.april@gmail.com

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Abstract
Primary cutaneous marginal zone lymphoma (PCMZL) is a B cell lymphoma with a very low metastatic rate. Radiographic monitoring for internal involvement may be indicated initially. Favored treatments include radiation and excision. Radiation has high risk of local recurrence. Excision carries risk of infection and scarring. We report successful long-term treatment of recurrent PCMZL via intralesional steroid injections into new lesions as they arose. This was preferred by the patient over her prior radiation and surgical treatments. Intralesional steroids have the advantages of being simple and well tolerated, without exposure to ionizing radiation or to the infection and scarring associated with surgery.

Keywords
primary cutaneous marginal zone lymphoma, cutaneous B-cell lymphoma, pcmzl, marginal zone lymphoma, intralesional corticosteroids

Introduction
The incidence of primary cutaneous lymphomas is approximately 10 cases per million inhabitants per year, and they are the most frequent extra-nodal lymphomas. Cutaneous B cell lymphoma (CBC L) comprises 25 to 30% of primary cutaneous lymphoma, and data and guidelines on management are lacking. CBC L prognosis differs greatly by subtype. Indolent CBC L includes primary cutaneous follicle centers lymphoma and primary cutaneous marginal zone lymphoma (PCMZL). PCMZL does not generally reduce lifespan.

Case report
In 2008 a 53-year-old Caucasian woman presented with a pink nodule on her right eyebrow. It was initially shaved off, but recurred in 2009, at which time punch biopsy revealed PCMZL. PET Scan, done as per the current management guidelines by the European Organization for Research and Treatment of Cancer and International Society for Cutaneous Lymphoma, did not reveal systemic involvement. The eyebrow was treated with radiation therapy with resolution. In 2011 the lesion recurred, was re-biopsied, showing recurrent PCMZL. It was again treated with radiation. In 2013 she developed three new similar lesions, one on the right shoulder and one on each arm. All three were surgically excised and biopsy again revealed PCMZL. Although she denied fever, chills, sweats or weight loss, she was referred to oncology for restaging. Bone marrow biopsy and a second PET scan revealed no concerning findings. Oncology deemed her to be without systemic involvement. One month after her oncology work up, she presented with three new plaques, one on the right forearm and two on the left shoulder. This time, after being presented with the option of radiation or surgery, she chose instead to receive intralesional triamcinolone injections. The lesions received a total of 0.85 mL of 5 mg / cc triamcinolone. The procedure was well tolerated. Lesions
improved dramatically. Six weeks later she was again injected, this time 0.2 mL total. Lesions fully resolved. Over the next three and a half years she was seen at four to eight week intervals and any new lesions were injected as above. During the next two years, the visits were gradually decreased to six-month intervals. All injections were well tolerated. The only adverse effects were indentations at some of the injection sites; the patient was not bothered by this.

**Fig A:** Elevated pink nodule on eyebrow with slight central scale. Eyebrow is preserved but on palpation there is the feeling of depth. This is after failure of radiation two times and excision.

**Fig B:** Intralesional steroids caused rapid resolution without scar and without recurrence for 2 years.
Discussion

Because systemic involvement is seldom seen, PCMZL is typically treated with radiation, excision, and/or rituximab (anti-CD20 monoclonal antibody).\textsuperscript{6} Rituximab carries risk of serious side effects.\textsuperscript{7} Surgery carries risk of infection as well as scar, and data on margins and recurrence is lacking.\textsuperscript{4} Radiation therefore has been a mainstay of PCMZL therapy. Unfortunately, radiation carries reported recurrence risks ranging from 25 to 63%.\textsuperscript{1,8}

Topical steroids can be tried as well but show limited efficacy.

Intralesional steroids therefore present a reasonable treatment. They are more cost effective and easier to administer than the other therapies currently used for the treatment of PCMZL.\textsuperscript{9} Reported risks include recurrence, atrophy, and temporary erythema.\textsuperscript{10} The patient in this report experienced limited local atrophy. She preferred this to the scars left by plastic surgery excision. Unlike her experience with radiation, none of the lesions treated with intralesional steroids recurred.

Current management guidelines by the European Organization for Research and Treatment of Cancer and International Society for Cutaneous Lymphoma do not mention intralesional corticosteroids in the treatment of PCMZL, even though there have been a few reports, including ours, of successful treatment with intralesional steroids.\textsuperscript{5,9,10,11} We propose that close monitoring with intralesional steroid injection of new lesions may be an effective and well-tolerated way to treat chronic PCMZL, and that larger controlled trials of this therapy should be encouraged.
References


