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Pathologic nodal evaluation is increasingly commonly performed for patients with Merkel cell carcinoma

Kelly G. Paulson, MD, PhD[1,2], **Jayasri G. Iyer, MD**[1], **David R. Byrd, MD**[3], and **Paul Nghiem, MD, PhD**[1,2]

[1]Department of Dermatology/Medicine, University of Washington, Seattle, WA, USA

[2]Department of Pathology, University of Washington, Seattle, WA, USA

[3]Department of Surgery, University of Washington, Seattle, WA, USA

To the Editor:

Merkel cell carcinoma (MCC) is a virus-associated, neuroendocrine skin tumor with a disease-associated mortality greater than 40%[1]. Consistent with this aggressive behavior, clinically localized MCC has non-palpable microscopic nodal involvement in one third of cases[2]. The American Joint Committee on Cancer established a key role for pathologic nodal evaluation in determining the extent of MCC spread for optimal prognostication and disease management[1, 3].

Historically, rates of pathologic nodal evaluation for MCC have been low. We used national registry data to determine whether rates of pathologic nodal evaluation for patients are increasing. A limitation of national registries is that they have often omitted clinical nodal status information for persons that were subsequently found to be pathologically node positive (thus making it impossible to determine pathologically node-positive patients were clinically node-negative at presentation). Therefore, we focused our study on patients that were ultimately classified as having only local disease and examined how often they were proven to be node-negative pathologically as compared to having no clinical evidence of nodal disease (but no pathologic node evaluation). Because multiple studies have demonstrated that cohorts of clinically node-negative MCC patients have a consistent ratio between occult positive (~33%) and truly pathologically node negative (~67%) cases, as more patients with clinical node-negative status are pathologically examined, there would be an increase in both microscopically node-positive and node-negative patients.

Data from a 20 year period from 1989–2008 were extracted from the Surveillance, Epidemiology and End Results (SEER) database using SEER*Stat software version 7.0.5[4]. A total of 2,303 patients with localized MCC were included. Of these, 634 (27.5%) underwent surgical pathologic regional nodal evaluation and an additional 4 patients underwent node aspiration (0.2%). Strikingly, the fraction of patients with localized disease who underwent pathologic nodal evaluation increased more than six fold over the two decades, from 6.3% in 1989 to 40.4% in 2008 (Figure 1). These increases were statistically

Corresponding Author: Paul Nghiem, MD, PhD, University of Washington, 850 Republican St, Seattle, WA 98109, Phone: 206-221-2632, Fax: 206-221-4364, pnghiem@uw.edu.

significant when comparing the five-year periods of 1994–1998 and 1999–2003 and between 1999–2003 and 2004–2008 ($p < 0.01$; Fisher's exact test; Table 1).

Pathologic regional nodal evaluation for patients with clinically localized MCC improves prognostic accuracy and lowers regional recurrence if treatment is carried out[1,2], and thus should be considered in the majority of cases[1]. Although rates of pathologic regional evaluation have significantly increased over the past two decades, further progress may be warranted because recent rates indicate that the majority of patients with apparently localized MCC do not undergo pathologic node evaluation. Because the 2010 AJCC staging system explicitly integrates information about clinical versus pathologic nodal evaluation, it is possible that improved awareness of the usefulness of SLNB will further increase its utilization in the coming years.

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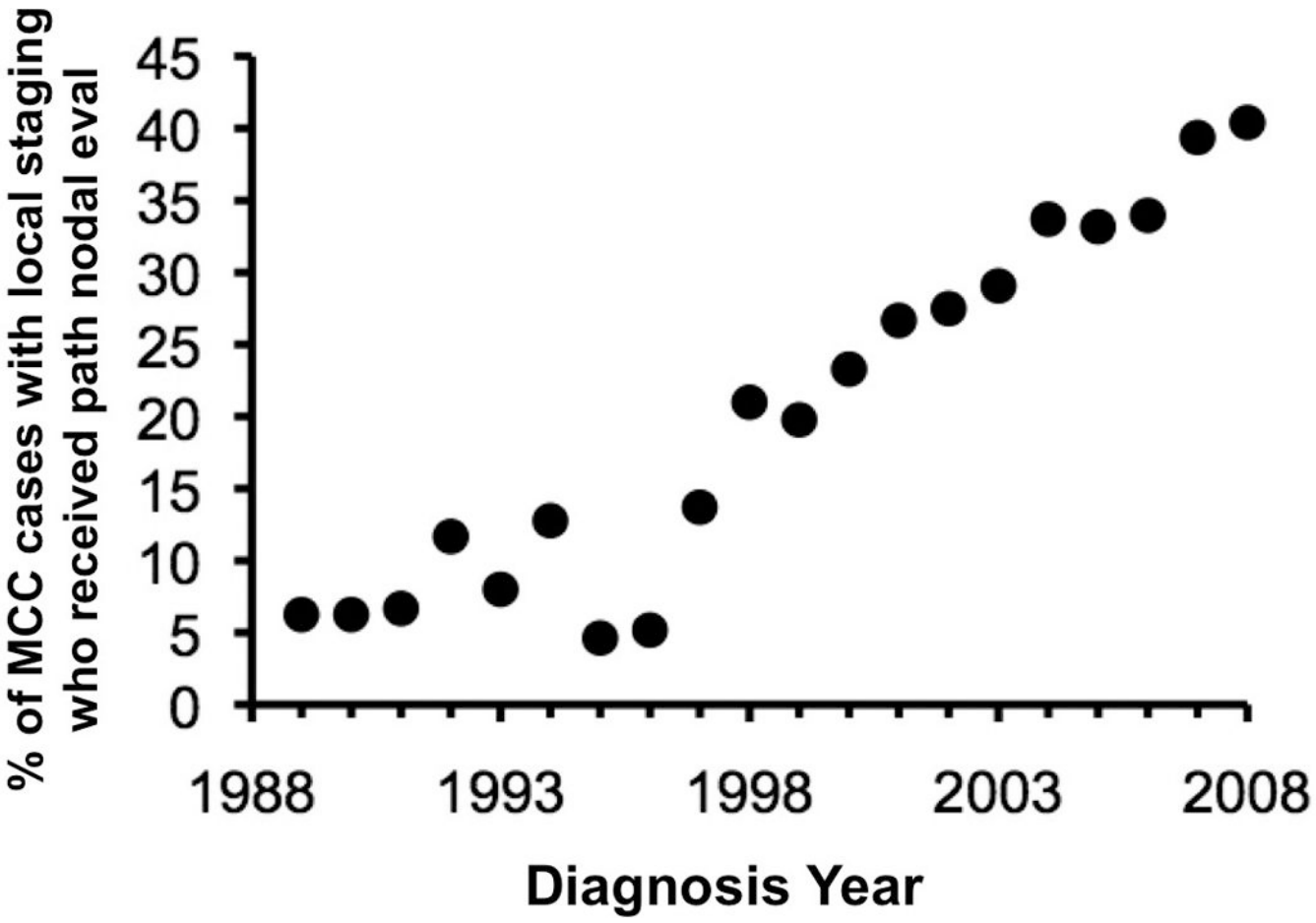

Figure 1.
Pathological nodal evaluation among "local-stage" MCC patients 1989–2008. N=2303.

Table 1

Percentage of patients with localized (Stage I or II) Merkel cell carcinoma who received pathologic regional nodal evaluation by five-year period. Data from Surveillance, Epidemiology, and End Results (SEER) database.

		Regional nodal evaluation (% patients)			
5-year period	**# patients w/ stage I/II MCC**	**None**	**Pathological**	**Aspiration**	**Unknown**
1989–1993	157	91.1	8.9	0.0	0.0
1994–1998	324	87.3	12.0	0.0	0.6
1999–2003	786	73.0	26.1*	0.1	0.8
2004–2008	1036	63.0	36.3**	0.3	0.4

* $p < 0.01$ comparing 1999–2003 to 1994–1998.

** $p < 0.01$ comparing 2004–2008 to 1999–2003.