RESEARCH LETTER

Mohs micrographic surgery in the Philippines: A 15-year review

To The Editor: Mohs micrographic surgery (MMS) has proven to be effective for microscopically removing tumor foci with normal tissue sparing.[1] This retrospective review describes the clinicohistopathologic profile of patients who underwent MMS at the Dermatology Center of St. Luke's Medical Center, Philippines from March 2003 to March 2018.

Of 476 total MMS cases, 404 cases with complete data were included. Patients' mean age was 64.8 years, with 94.9% in the >40 year age group. The majority of patients (83.7%), both Filipino and Caucasian, were residing in the Philippines at the time of diagnosis and surgery. A total of 242 patients were Asians (Table I). Although nonmelanoma skin cancer (NMSC) has been proven to be more common among Caucasians, this study has shown that Asians can be similarly susceptible to NMSCs as well. After 15 years, the number of Asians diagnosed with NMSC, especially Filipinos, was almost twice as many as Caucasians. This may reflect either an increasing incidence of NMSCs among Asians or an increased awareness of NMSCs.

More than 90% of MMS cases were primary, while <10% were recurrent. Recurrent cases included incompletely excised NMSCs or those that reappeared after standard wide excision, MMS, radiation, cryotherapy, or topical chemotherapy. Most recurrent cases had undergone wide excision more than twice before referral to the center.

The most common tumor was basal cell carcinoma (BCC) (78%), a finding which is similar to the majority reported in the literature. Squamous cell carcinoma (SCC) and SCC in situ followed second at 16% (Table II).

Most tumors were located on the face (290 cases, 72%), especially the nose (27.2%). More than 1/3 of tumors were >2 cm (largest dimension) before surgery. The postoperative defect size is evidence of the subclinical spread of NMSCs, especially BCC. This observation is corroborated by a three-fold increase in the mean area from preoperative tumor size to postoperative defect size. Most tumors cleared after 2 stages (65%). Most of the postoperative defects were closed using flaps (40.1%), followed by primary closure (26.7%), then full-thickness skin graft (23.8%).

MMS success was measured by the recurrence rate within 5 years or more. All primary BCC cases treated at the center have not recurred within this 15-year study, bringing the cure rate to 100% and the recurrence rate to 0%. Among 29 recurrent tumors, 2 recurred (1 BCC and 1 SCC) bringing the recurrence rate to 6.9%, close to that reported in other studies. In the 12-year study by Catala[2] involving 534 cases of BCC, the recurrence rate following MMS for recurrent BCC was 10.4% (32/278) compared with 1.2% (3/256) for primary BCC. Of note, 2 Fitzpatrick Skin Type 5 patients with recurrent BCC developed an SCC. Risk factors included chronic scarring and inflammation from secretions around the mouth and nose, which resulted in the development of SCC after 10 and 4 years, respectively.[3]

Table I. Distribution of patients according to race

Race (n = 404)	n (%)
Asian	242 (59.9)
White	143 (35.4)
Native Hawaiian/Pacific Islander	14 (3.5)
Hispanic	5 (1.2)
American Indian/Alaska Native	0 (0.0)
Black	0 (0.0)

Table II. Frequency of histopathologic diagnosis

Histopathologic diagnosis (n = 404)	n (%)
Basal cell carcinoma	315 (78.0)
Squamous cell carcinoma	43 (10.6)
Bowen's disease	21 (5.2)
Basosquamous carcinoma	8 (2.0)
Dermatofibrosarcoma protuberans	4 (1.0)
Extramammary Paget's disease	3 (0.7)
Atypical fibroxanthoma	2 (0.5)
Merkel cell carcinoma	1 (0.2)
Mucinous eccrine gland carcinoma	1 (0.2)
Benign fibrohistiocytic tumor	1 (0.2)
Mammary Paget's disease	1 (0.2)
Primary adenocarcinoma of the scrotal skin	1 (0.2)
Atypical keratinocytes on intradermal nevus	1 (0.2)
Vulvar intraepithelial neoplasia	1 (0.2)
Eccrine porocarcinoma	1 (0.2)

The clinicohistopathologic profile of patients who underwent MMS is reflective of local, regional, and international data. Postoperative data and surveillance prove that MMS is both a conservative and reliable approach for the treatment of NMSCs.

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Conflicts of interest

None disclosed.

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