Three Cases of Malignant Melanoma

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Malignant Melanoma is rare, occupied less than about 0.5% of malignant skin cancer, in Korea. We have experienced three cases for recent 2 years.

Case 1 was a 65-year-old woman suffered from 2.0×3.0cm sized fungating mass with central ulceration on the left heel for 1 year duration. Left inguinal lymph node was enlarged. She expired 9 months later in spite of treatment with surgical excision, lymph node dissection, and chemotherapy with DTIC.

Case 2 was a 37-year-old woman showed 1.0×1.5cm sized lobulated, black papules on the right preauricular area for 8 years duration. Satellite lesions developed 1 year ago. There were recurrences on the excisional sites after treatment with wide surgical excision.

Case 3 was a 45-year-old woman had 0.5×2.0cm sized, black pigmented patch with satellite lesions on the left sole for 2 years duration. Surgical excision and follow-up for 1 year after treatment showed no recurrence yet. (Ann Dermatol 3:(1) 68—71, 1991)

Key Words: Malignant melanoma

Incidence of cutaneous malignat melanoma represents approximately 1 to 3 percent of all cancers.[1] It occurs most often in light-skinned people but shows the lowest incidence among the Asians.[2] Kim et al[3] reported that malignant melanoma occupied about 0.48% of all malignant tumors in Korea, 1976. The number of death due to malignant melanoma in Japan increased from 29 cases, 1950 to 197 cases, 1985.[4] This data is a indirect evidence suggest that the incidence of malignant melanoma is increasing in Asian. Also in Korea, there are significant increasing number of case reports for the recent several years.[4] The continuing rise in the reported incidence of cutaneous melanoma suggests most common type of malignant melanoma occurs in Asian is not superficial spreading but acral lentiginous that develop at the palms, soles and subungual area.[4]

We report three cases of malignant melanoma (two acral lentiginous, one nodular type) experienced during recent two years.

REPORT OF CASES

Clinical, histopathologic finings, and treatment are summarized in the table 1.

DISCUSSION

Incidence of malignant melanoma is rising, and the mortality is also rising although the curve is less steep. Although for years the incidence of malignant melanoma was considerably higher in men, the recent increase in melanoma among women, especially in young women has made the rate more nearly equal in both sexes.[5] This increasing incidence among younger individuals is in contrast to the usual peak incidence in the fifth to seventh decade of life[5]. In our cases, patients

Received Nomember 4, 1990
Accepted for publication January 18, 1991
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This articles were presented at 6th Japan-Korea Joint Meeting of Dermatology on November, 4, 1989, at Tokyo, Japan.

Table 1. Summary of three cases of malignant melanoma

	Case 1	Case 2	Cse 3
Age/Sex	65/F	37/F	45/F
Duration	1 year	8 years	2 years
PMH & FH	N-C	N-C	N-C
Skin finding	Fungating mass with central ulcer (Fig. 1)	Lobulated papules with satellite lesions (Fig. 2)	Black colored patch with satellite lesions (Fig. 3)
Site	Left heel	Right preauricular rigion	Left sole
LN involve	(+)	(−)	(−)
Pathologic finding	Atypical melanocytic proliferation with pseudoepitheliomatous hyperplasia and deep dermal invasion (Fig. 4) Metastatic melanoma cells in inguinal lymph node	Junctional activity with downward streaming from the epidermis into the dermis of tumor cells possessing atypical nuclei (Fig. 5)	Round & pagetoid cells in the basal layer and nest of spindle cells in the upper dermis & melanin pigments in stratum corneum (Fig. 6)
Treatment	Sùrgical excision & lymph node dissectrion Chemotherapy with DTIC	Surgical excision	Surgical excision
Result & follow up	Expired 9 months later	Recurrence	No recurrence for 1 year

PMH: Past medical history FH: Family history LN: Lymphonde
N-C: Not contributory DTIC: Dimethyl triazenoimidazole carboxamide

were female, ranged from 37 to 65 years in age.

The four main subdivisions of melanoma are lentigo maligna melanoma, superficial spreading malignant melanoma, nodular malignant melanoma, and acral lentiginous melanoma[5]. Lentigo maligna melanoma develops from a lentigo maligna, a tan macule that extends peripherally, with gradual uneven darkening. Such lesions make up approximately 5% of primary cutaneous melanomas of the malignant melanoma.[2, 5] Superficial spreading melanoma is the commonest type of melanoma, constituting 70% of them. It occurs from superficial spreading melanoma in situ. Development into an invasive melanoma is usually indicated by the appearance of papules and nodules or by diffuse induration. Ulceration, if it occurs, is a late feature.[2, 5] Nodular melanoma usually presents as a uniformly pigmented papule or nodule of varying size. It constitute about 15% of all melanomas. Color ranges from blue-black or dark brown to uncommon amelanotic type.[2, 5] Acral lentiginous melanomas are distinguished by involvement of hairless areas, such as palms, soles, fingers and toes. They are uncommon and account for less than 10% of primary cutaneous melanomas. However it is most frequent form in blak and orient.[2, 5-7]

Common histopathologic findings of melanoma are characterized by elongation of rete ridge, junctional activity at the epidermal-dermal portion, nest formation of tumor cells, and lymphocytes and plasma cells infiltration in the dermis[6]. We considered case 1 as non-melanoma skin cancer clinically, but histopathologic examination showed the features of acral lentiginous melanoma. Case 2 was considered as nodular malignant melanoma and case 3 as acral lentiginous malignant mela-

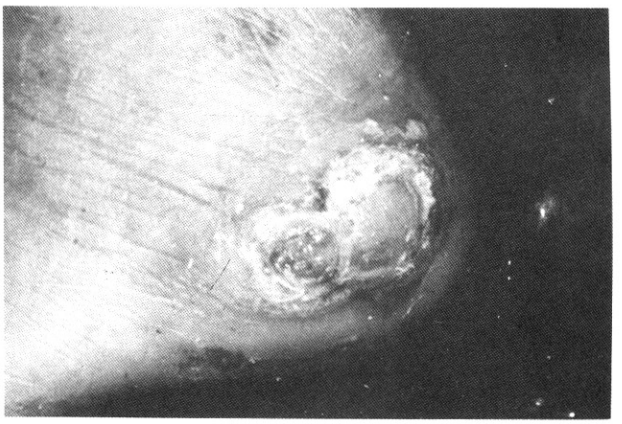

Fig. 1. 2.0×3.0cm sized fungating mass with central ulceration on the left heel.

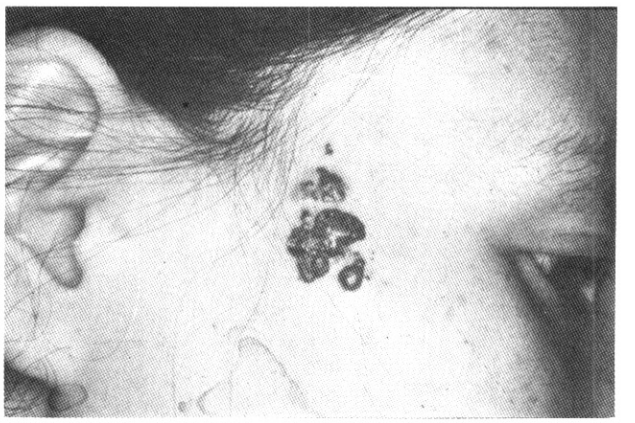

Fig. 2. 1.0×1.5cm sized, lobulated, black papules with satellite papules on the right preauricular area.

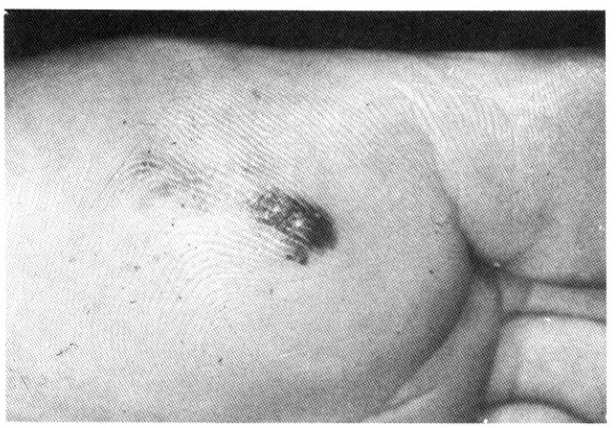

Fig. 3. 2.0×0.5cm sized, black patch with satellite lesions on the left sole.

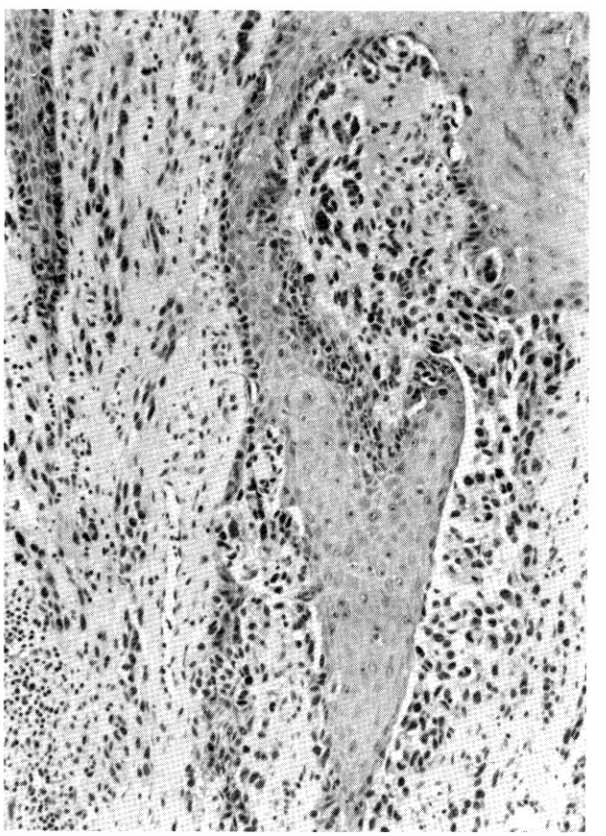

Fig. 4. Atypical lentiginous melanocytic proliferation with pseudoepitheliomatous downward elongation of rete ridges (H & E stain, ×100).

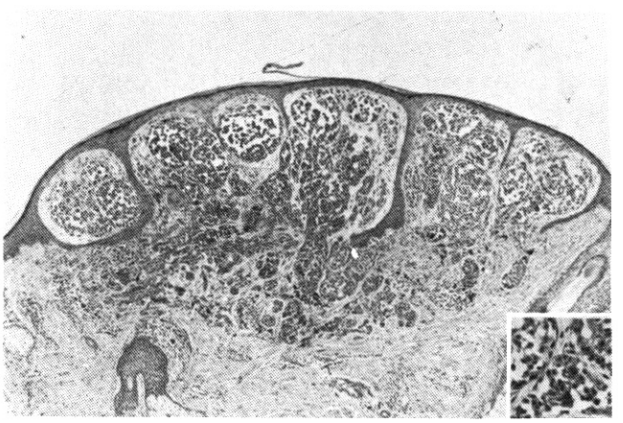

Fig. 5. Juctional activity with downward streaming from the epidermis into the dermis of tumor cells (H & E stain, ×100) Inset: Majority of cells are epithelioid type, which showed several mitotic figures (H & E stain, ×400).

noma in situ.

Metastasis may develop from melanoma that generally are thicker than 0.76mm.[8] Melanoma

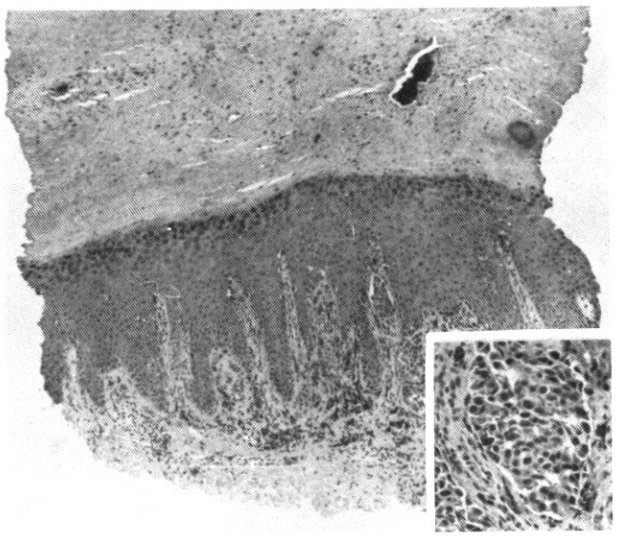

Fig. 6. Round and pagetoid cells in the basal layer and nest of spindle cells in the upper dermis with melanin pigments in the stratum corneum (H & E stain, ×100) Inset: Nest of spindle cells in the upper dermis (H & E stain, ×200).

may metastasize to the surrounding skin and regional or extraregional sites. Lung, skin and subcutaneous tissue, and liver have been reported to be among the most common extraregional sites of metastatic involvement.[8] In our cases, only case 1 revealed metastasis to inguinal lymph node, but visceral involvement were unable to find in all three cases.

Surgery is the treatment of choice for malignant melanoma.[9] Early diagnosis (when malignant melanomas are <0.75mm thick) and prompt surgical removal are the key to curing malignant melanoma.[9] Other modalities being investigated for certain malignant melanomas include cryosurgery, lasersurgery, microscopically controlled (Mohs) surgery, x-ray therapy, and local immunotherapy.[10] Combination chemotherapy such as cis-dichlorodiamine-platinum, vinblastine and dimethyl triazenoimidazole carboxamide (DTIC) or bleomycine have been reported to have higher response rates.[9, 10] Some kinds of immunotherapy including DTIC-BCG combination chemotherapy, recombinant α and γ interferon, interleukin, tumor vaccines and monoclonal antibodies targeting melanoma cell are reported more effective and less toxic.[10-12] But currently there is no chemotherapeutic nor immunotherapeutic method that has consistently proved reliable for the treatment of stage 2 or stage 3 metastatic malignant melanoma.[9, 13] In our case, we treated case 1 with surgical excision, lymph node dissection, and chemotherapy with DTIC (200mg/day×10 day, 1 month interval, 3 times) but she expired 9 months later in spite of therapy. Case 2 was recurred on the excisional site after three and nine months of treatment with surgical excisions. In case 3, we could not find recurrence after treatment with surgical excision for 1 year.

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