

**CLINICAL FEATURES OF MELANOMA AT  
THE NATIONAL HOSPITAL OF  
DERMATOLOGY AND VENEREOLOGY -  
VIETNAM FROM 2008 TO 2012**

**Tran Hau Khang, Nguyen Thi Ngoc Mai  
and  
Nguyen Huu Sau\***

*National hospital of Dermato Venereology  
Hanoi, Viet Nam  
e-mail: nguyenhhuusau@yahoo.com*

**Abstract**

Objectives: Investigate the clinical features of malignant melanoma. Method: A retrospective traversal study basing on 60 patients with malignant melanoma at the National hospital of Dermato Venereology and the National hospital of Cancers. Results: The mean age of patients was 56.4 ± 15. Female to male ratio was 1.6/1; 60% of patients were farmer, 66% of patients had lesions on foot, in which 23% on heel, 12.8% on plantar and 8.5% on the other areas of the foot. Nodular melanoma was 36.7%, acral melanoma was 33.3%, lentigo malignant melanoma was 3.3%, superficial melanoma was 5%. 60.7% of the patients had lymph node metastasis. 48.3% of all cases were at the III stage of AJCC classification. Conclusions: Malignant melanoma frequently occurred in elderly people. It was more common in women than men. Farmers were the most affected. Acral melanoma accounted for one third of all clinical types. 3/5 of the patients had lymph node metastasis.

---

\*Corresponding author

**Key words:** Malignant melanoma, skin cancer.

## 1. Introduction

Melanoma is a malignant tumor of melanocytes. This is the most fatal type among skin cancers because of its high rate of metastasis and mortality. Melanoma accounts for approximately 5% of skin cancers, however it is responsible for about 75% of skin cancers induced deaths [5].

The incidence of melanoma is different from countries and races. Melanoma is more common in western countries where people have fair skin. The incidence of melanoma in Viet Nam is relatively low. A report in 1993 noted that the incidence of melanoma at Ha Noi was 0.3-0.4/100,000 of population [2]. Most of patients were diagnosed at late stages of melanoma. One of core reason for this situation is the lack of melanomas awareness of both patients and health cares. As a result, we have conducted this study on clinical features, histopathological findings of patients with melanoma at the National hospital of Dermato - Venereology and the National hospital of Cancers, Viet Nam.

## 2. Method

The study based on medical documents of inpatients diagnosed with melanoma at the National hospital of Dermato - Venereology and the National hospital of Cancers, Viet Nam from Jan, 2008 to Dec, 2012. Clinical features, and histopathological findings of patients with melanoma were included in the study. Other parameters such as age, gender, job and medical history ...of the patients were analysed statistically by SPSS 16.0. Qualitative parameters were described as percentages (%). Quantitative ones were presented by means  $\pm$ standart deviations.

## 3. Results

Investigation of clinical features and related factors of melanoma in 60 patients.

Groups of age (years old)	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99
n	2	8	12	13	9	11	4	1
%	3.3	13.3	20	21.7	15	18.3	6.7	1.7

Table 1: Age distribution of the patients (n=60); The mean age was 56.4  $\pm$  15 years old. Minimum was 21 years old, the maximum age was 96 years old.

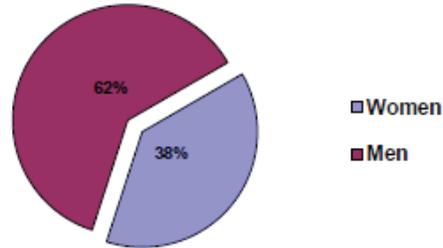


Figure1: Gender distribution of the patients (n=60). ratio female: male was 1.6:1

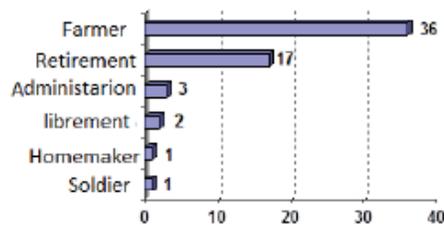


Figure 2: Jobs distribution of the patients (n=60). Farmers accounted for the highest rate of 60%, the following was the group of retired peoples of 28.3%. The lower rates were belonged to the groups of officers of 5%, other jobs of 3.3% and army of 1.7%.

Location	n = 47	%	
Head – face - neck	4	8.5	
Trunk	4	8.5	
Upper limbs	8	17	
Lower limbs	Thigh	3	6.4
	Leg	1	2.1
	Instep	4	8.5
	Heel	11	23.4
	Plantar	6	12.8
	Toes	2	4.3
	Inter-toes	4	8.5
		66	

Table 2: Distribution of melanoma lesions; 66% of melanoma lesions were on lower limbs, among these, melanoma on heel were 23.4%, on plantar were 12.8% and on both instep and inter-toes were 8.5%.

Clinical types of melanoma		n	%	
Melanoma in cutaneous area	Superficial melanoma	3	5	78.3
	Nodular melanoma	22	36.7	
	Acral melanoma	20	33.3	
	Lentigo maligna melanoma (Dubreuilh)	2	3.3	
Mucosal melanoma		9	15	
Melanoma without primary lesion		4	6.7	
Total		60	100	

Table 3: Distribution of clinical types of melanoma (n=60); Nodular melanoma accounted for 36.7%. Acral melanoma was 33.3%. Lentigo maligna melanoma (melanoma Dubreuilh) was 3.3%. Superficial melanoma was 5%. There were 4 patients not detected any primary skin lesions.

Lymphatic nodule metastasis		Number of nodules (n=34)		%	
nodules in one area	Neck	2	27	79.4%	100%
	Occipital	2			
	Jaw	1			
	Axilla	3			
	Groin	19			
	Fossa poplitea	1			
	Abdomal	1			
Nodules in 2 areas	Groin and pelvis	2	7	20.6%	
	Groins	2			
	Groin and the same side fossa poplitea	3			

Table 4: Lymphatic nodule metastasis; 60.7% of the patients had nodule metastasis. Among these cases, metastasis to 1 area of nodules were 79.4% and metastasis to 2 areas of nodules were 20.6%. There were 4 cases suspected of having lung and liver metastasis.

Stages	I	II	III	IV	tổng
Number of cases	13	12	29	6	60
%	21.7	20	48.3	10	100

Table 5: Melanoma stages of AJCC (American Joint committee on cancer). Patient at III stage melanoma accounted for the highest rate of 48.3%. The rates of I stage, II stage melanoma patients were 21.7% and 20% relatively. Patients at the IV stage melanoma had the lowest rate of 10%. Most of the patients were diagnosed at late stages of melanoma.

## 4. Discussion

Our study on 60 patients with melanoma showed the youngest patient was 21 years old, the oldest patient was 96 years old, the mean age was 56 years old. The age group of 50-59 years old had the highest rate of 21.7%. This meant that melanoma is uncommon in young peoples. However, there were 2 patients at the age group of 20-29 years old (3.3%).

The female to male ratio in our study was 1.6/1. Patients who are farmers accounted for the highest rate of 60.7%. These patients were assumed to expose to sunlight for longer time than others. Ultraviolet light in sunlight is a causative agent of skin cancers [6].

In a study in New Zealand on sites of melanoma, authors reported that melanoma in trunk is common in males while melanoma in lower limbs is common in females [6]. In our study, the most common site of melanoma was lower limbs which accounted for 66% of the patients. Among patients having melanoma at lower limbs, 27/31 of them had melanoma on foot, particularly the heel. Melanoma on heel appeared in nearly half of cases with affected foot. The other common site on foot was the plantar. Study of Bui Thi Bac (1999) also noted a high proportion of melanoma on lower limbs [1].

Our study reported 42% of the patients having tumors on skin. Most of melanoma lesions appear on normal skin regions. It is often a small, dark spot at first then develops in size and creates an ulcerous tumor which bleeds easily. We had 2 cases that melanoma derived from a mole, the lesion then became a dark tumor on the skin. Besides, there are some cases that melanoma lesions appear on skin without any color change. They are solid and painless tumors on the skin. These cases often are misdiagnosed at local medical settings. The patients would have their tumor removed without histological findings. In our study, there were 3 cases having melanoma without color change. There was a patient whose melanoma lesion is a tumor in his forearm. The tumor developed quickly in three months, invaded skin with diameter of 2cm. This patient was misdiagnosed with benign fibroma which was removed at Transport

hospital. Fortunately, his histological findings was done showed a suspicion of melanoma. The patients then was referred to the National hospital of Cancers.

The acral melanoma accounted for 33.3%. Our result was similar to data of other Asian countries. Study in China noted that acral melanoma is 41.8%, nodular melanoma is 19.7% [9]. Study in Taiwan reported 58% of cases is acral melanoma, 30.4% of the cases is nodular melanoma, 10.5% is superficial melanoma and 1.1% is lentigo maligna melanoma (melanoma Dubreuilh) [4]. The distribution of melanoma clinical types was different from reports of countries with high incidence of melanoma such as Australia, New Zealand and other European countries. Studies in these countries showed that rates of superficial melanoma, nodular melanoma, lentigo maligna melanoma and acral melanoma is 70%, 15%, 13% and 2 - 3%, relatively [4,7]. The clinical features of acral melanoma is changes. The skin of plantar, heel or acral of fingers/toes is thicker than other sites, melanoma oftens appear as an ulcer or a plaque of hyperpigmentation. Usually, melanoma under tip is presented as a dark brown streak on the tip. Hutchinson sign is described as the spread of pigmented lesion to both sides of the tip, even beyond to the tip. Patients with this type of lesions often delay seeking medical help untill their skin lesions become a tumor and damage the affected tips. However, these pigmented lesions need to be differentiated from injures on tips. If suspected, doctors should ask the patients carefully for their recent history of trauma. There are some features to differentiate a melanoma lesions from an injure. An injure on tip will fade and disappear completely after 2-3 months. If not, a melanoma must be examined carefully. Lesions on tip is also need to differentiated from onychomycosis, necrosis and pyoderma gangrenosum.

Also, melanoma on heel is often detected late. In this case, melanoma lesion is a dark spot on normal skin. Melanoma lesion can develop from a small mole that distracts patients attention from a serious condition. After a time, the lesion becomes bigger, ulcerous and bleeds easily. Heel is the most common site of melanoma on foot. It is assumed that the heel is easily rubbed and injured, particularly in patients who often contact with agriculture chemycals without shoes [3]. It is not easy to detect melanoma on heel at early stage because its lesion is similar to a normal injure, infection or a chronic ulcer of some other diseases such as diabete... Melanoma with atypical colour oftens missed. Moreover, thick skin of heel can conceal signs of a melanoma that leads to delayed diagnosis. For these reasons, histological findings is very important for all suspected skin lessions. Melanoma on heel has the worst prognosis in comparison with other sites of lower limbs.

In clinical practice, melanoma on the other sites is a challenge for doctors to detect. They are rare types of melanoma such as mucosal melanoma, melanoma without primary tumor. Hence, diagnosis is often made at late stages of melanoma. Regarding to these types of melanoma, diagnosis completely depends on histological findings. In our study, there were two cases who seeked

medical help due to their abnormal vaginal bleeding. Vaginal examination of one patient showed a black, bleeding tumor in the fore of the vaginal. The other had melanoma on her vulva which was misdiagnosed as a vaginal polyp. There was a patient with tumor in nose sinus that caused one side stuffy nose for nearly one month. The patient only went to see doctor when his nose painful, swollen and bleeding. A careful examination detected a black tumor in his nose sinus which was removed right after that. The histological findings brought diagnosis of melanoma. There was a case of melanoma in oral mucosa. The patient saw a small brown spot in her upper jaw. This spot was getting bigger in four months creating a brown, 1.5 cm diameter plaque with black dots in the middle. There was a patient having melanoma on the right eye. The patient said the tumor developed and affected her vision. She went to see doctor when she felt painful. Her right eye was removed completely. Her biopsy result asserted the tumor was melanoma. In our study, there were 4 patients having medical check due to their nodules swollen without any skin lesion. All 4 cases were diagnosed melanoma by histological findings. The results showed an invasion of lymph nodes by epithelial cells which are atypical cells with irregular nucleus, big or small and dark grain nuclei, hyperchromatism, distortion of rim of nuclei, coarse chromatin. These epithelial cells arranged into clumpy, lost polarity.

Investigation on stages of melanoma showed 48.3% of the patients were diagnosed at III stage of melanoma, 20 % of the patients were detected at II stage and 21.7% of the patients at I stage. Our results were similar to findings of Bui Thi Bac [1]. Reason for delayed diagnosis of patients was assumed that the patients delayed to have their skin lesions examination. 38/60 of the patients had metastasis. There were 4 cases having metastasis to both lymph nodes and others organs (lung, liver and skin). There were 7 patients having metastasis to 2 regions of nodules. The wide use of image analysis methods such as ultrasound, MRI, PET CT helps to detect metastases of melanoma sooner. Patients who delayed their health checking could not pay attention to atypical position of the lesions. The underlying reason is the lack of melanoma awareness of both patients and doctors. Delayed melanoma diagnosis leads to failure in treating melanoma that shortens patients life.

## 5. Conclusion

Study on 60 patients with melanoma, some conclusions were made:

- The age group of 50-59 years old accounted for highest rate (21.7% of the patients), the following was the age group of 40-49 years old (20%), the mean age was 56 years old.
- Melanoma incidence in female was 1.6 time higher than in male.
- Farmers were affected the most. The possible reasons for this is the high

expose to sunlight of farm working.

- 83.9% of the patients had skin lesions, the most common site was lower limbs (66%), particularly heel and plantar.

- The most common type was nodular melanoma (36.7%) and acral melanoma was 33.3%.

- Most of the patients were diagnosed at late stages of melanoma, 8.3% of cases was detected at III stage of melanoma. This results in bad prognosis.

- 56.7% of the patients had metastasis to lymph nodes, 1 case had liver metastasis, 1 case had lung metastasis, 2 cases had cutaneous metastasis.

## References

- [1] Bui Thi Bac, *Study on clinical features, histopathological findings of patients with melanoma*, Hanoi Medical University, (1999), 26-27.
- [2] Nguyen Duc Hung, Pho Duc Man, Cung Thi Tuyet Anh, Nguyen Van Son, Vu Van Vu, Nguyen Manh Quoc, *Epidermyology of cancers at Ho Chi Minh city and other southern provinces in Viet Nam*, Viet Nam Medicine, **173**(7),(1993), 31-37.
- [3] Adele Green, Margaret McCredie et al., *A case-control study of melanomas of the soles and palms (Australia and Scotland)*, Cancer Causes & Control, **10**(1), (1999), pp 21-25.
- [4] Chang JW, Yeh KY et al., *Malignant melanoma in Taiwan: a prognostic study of 181 cases*, Melanoma Res, **14**(6), (2004), 537-541.
- [5] Jerant AF, Johnson JT et al., *Early detection and treatment of skin cancer*, Am Fam Physician, **62**(2),(2000),357-368, 375-376, 381-382.
- [6] Katsambas A., Nicolaidou E., *Cutaneous malignant melanoma and sun exposure*, Recent developments in epidemiology, Arch Dermatol, **132**(4), (1996), 444-450.
- [7] Markovic SN, Erickson LA et al., *Malignant Melanoma in the 21st Century, Part 2: Staging, Prognosis, and Treatment*, Mayo Clin Proc., **82** (4),(2007), 490-513.
- [8] Zhihong Chi, Siming Li et al., *Clinical presentation, histology, and prognoses of malignant melanoma in ethnic Chinese: A study of 522 consecutive cases*, BMC Cancer **11**(85),(2011), 1471-2407/11/85.