The Clinicohistopathological of Skin Tumors in Dr. M. Djamil Hospital and Pathology Anatomy Departement, Medical Faculty of Andalas University Padang during 2014-2017

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Abstract: Skin tumors may be encountered by a dermatologist either as presenting complaints or as incidental findings. Certain tumors are easily recognized clinically, while others must confirmed by histopathology. In Indonesia, there has been less data about skin tumors. The aim of this study to evaluate characteristics and histopathological of skin tumors in Dr. M. Djamil Hospital and Pathology Anatomy Department, Medical Faculty of Andalas University during 2014-2017. A retrospective study from medical record of Dr. M. Djamil Hospital Padang and Pathology Anatomy Departement, Medical Faculty of Andalas University during 2014-2017. Data was collected from medical record during 2014-2017. Variables studied were, age, sex, and histopathology of the tumors. Benign skin tumor was 72,09% and malignant skin tumor was 27,91%. Male were affected 49,2% and female were 50,8 % in benign skin tumors, but in malignant skin tumors male were affected 51,45% and female 48,55%. Benign skin tumors most common on 30-60 years old (45,86%), followed by <30 years old (30,83%) and >60 years old (23,31%). However, malignant skin tumors most common >60 years old (69,9%), and rare on <30 years old (1,94%). All of malignant skin tumors were done the histopathology examination, but only 51,8% in benign skin tumors. Skin tumors are common tumor in Dr. M. Djamil Hospital Padang and Pathology Anatomy Departement, Medical Faculty of Andalas University. The feature of skin tumors appear nearly similar to international figures with a low incidence of melanositic skin tumors.

1 INTRODUCTION

The skin is a heterogenous organ with varied elements having ectodermal and mesodermal origins. Most of these individual elements are capable of producing skin tumors (Chatra and Bhat, 2016). Based on their origin, they can be devided into the following: keratinocytic tumors, melanocytics tumor, appendageal tumors, soft tissue tumors. Therefore, the number of different skin tumors exceeds that any organ system (Haroun et al., 2013).

Benign skin tumors such as syringoma, skin tags are commonly encountered by a dermatologist and are almost considered to be physiological in the elderly (Haroun et al., 2013). Although not as frequent, the incidence of basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) is increasing worldwide, Caucasians being the primary victims. However, everyone, regardless of skin color, can fall prey to it. Unfortunately, many patients and even some physicians are under the impression that non Caucasian people are immune to this disease (Al-Maghrabi et al., 2014). That is one reason, people of color are diagnosed with skin cancer at later stages. These delays mean that skin cancers are often advanced and potentially fatal, whereas most skin cancers are curable if caught and treated in a timely manner (Baldwin and Dunn et al., 2013). These tumors can show an extraordinary variation in their structure, and it is this variation that causes difficulties in some cases in establishing a definitive pathological diagnosis (Alwunais and Ahmad, 2016). The aid of histopathology is crucial in clinching the right diagnosis and in further management. Traditionally, smaller lesions have been the domain of dermatologists, while the larger and deeper masses were considered a surgeon's forte. Malignant lesions, even when small, have been referred to the surgeon for management. Nevertheless, the role of a dermatologist is rapidly expanding in many

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disciplines, management of skin tumors being one of them (Hussein, 2005).

2 MATERIALS AND METHODS

A retrospective study was conducted on all of skin tumor cases diagnosed during the period 2014-2017. Data were collected from medical record during 2014-2017. Variables studied were, age, sex, site, and histology of the tumor. We exclude all data that did not include any of the above variables.

3 RESULTS

Table 1 show two hundred and sixty six benign skin tumor patients were studied during the period 2014-2017. One hundred and thirty one (49,2%) were males and one hundred and thirty five (50,8 %) were females. During 2014-2017 the patient <30 years old were eighty two (30,83%), 30-60 years old were one hundred and twenty two (45,86%) and >60 years old were sixty two (23,31%). Histopathology examination were done from benign skin tumors one hundred and thirty eight (51,8%) as seen in Table 1.

Table. 2 show one hundred and three malignant skin tumor patients were studied during the period 2014-2017. Fifty three patients (51,45%) were males and fifty patients (48,55 %) were females. During 2014-2017 the patient <30 years old were two (1,94%), 30-60 years old were twenty nine (28,15%) and >60 years old were seventy two (69,9%) . All of the malignant skin tumors do the histopathology examination, as seen in Table 2.

4 DISCUSSION

Most of the tumors were easily recognizable clinically, hence, in these cases, histopathology was just a tool to confirm the diagnosis. However, a few cases had dubious clinical appearance and required clinicopathological correlation.[1] In this study we found 226 cases of benign skin tumor and 103 cases of malignant skin tumor. Among the benign skin tumor only 51,8% confirm with histopathology, but all of malignant skin tumors confirmed with histopathology examination. Seborrheic keratosis were the most benign skin tumor, followed by pigmented nevi. Chathra et all, India 2016 reported seborheic keratosis was the most common skin tumor from keratinocytic origin (Chatra and Bhat, 2016).

In this study sebaceous nevus is the most common appendegeal skin tumor, followed by trichoepitelioma and syringoma. Das N, India 2016 reported syringoma and trichoepitelioma were the common skin appendegeal skin tumors. Most of the patients presented to us were not even aware of the disease because of their asymptomatic and benign nature. Majority of the appendageal tumors were diagnosed after long duration of their presence (>10years), yet there was hardly any effect on prognosis. In rest of the patients, the main concern of coming and seeking treatment was cosmetic disfigurement as the facial involvement was most frequent (Das et al., 2011).

Haroun et al, Iraq 2013 reported skin cancer accounts for 4,7% of all new cancer cases in Basrah during 2005 to 2009. The mean age of skin cancer cases was 54,8+18,4 years (for males 55,2+17,8 and for females 54,4+19,0).[2] Maghrabi et al, Saudia Arabia 2004 reported the mean age of skin cancer was 62,2 years old and 58.75 years old in Pakistan. Another study reported from Western and Asian countries skin cancer appears rare before 30 years.[3] In our study, the most affected age groups in this study was beetwen >30-≤60 years of old (67.96%) and rare on ≤ 30 years old. Our country located in khatulistiwa region, it makes sun exposure more higher, and it can make incidence of skin tumor more younger in our departement.

Baldwin and Dunn, Korea 2013 reported the incidence rate of skin cancer increases, it is unlike many cancers can be prevented with a range of personal and environmental life style factors, including the use of personal protective clothing, hats and sunglasses along with a sunscreen applied correctly and the use of environmental adaptations to the outdoor environment such as shade (Baldwin and Dunn, 2013). This study provides further baseline information about skin cancer in this region of Padang. In this study, skin cancer appears more in females and male. Hussein, 2005 were found opposite figures with higher male:female ratio of 1.6:1 in Egypt. In our country, women in rural areas are working outdoors in farming and animal herding. This might explain female's higher incidence of skin cancer. Furthermore, women in rural area mostly fair skinned than males and unaware about protective

Table 1. Demographic characteristic of benign skin tumors

Benign skin tumor	Sex		Age (years old)			Histopathology	
	Male	Female	<30	30-60	>60	Yes	No
Seborrheic keratosis	43	36	4	36	39	27	52
Epidermal cyst		1		1		1	
Syringoma	1	11	3	8	1	3	9
Trichoepitelioma	2	11	13			13	
Steatocystoma	5	1	6			6	
Sebaseous nevus	14	6	6	14		6	14
Spilus nevus		1		1		1	
Becker's nevus	2		1	1		2	
Dermoid cyst	5	3	1	6	1	5	3
Sebaseous hyperplasia	4	5	9			5	4
Melanositic nevi	14	18	17	14	1	14	18
Senilis lentigo	3	3			6		6
Lipoma	8	1	1	4	4	8	1
Xanthoma	4	8	2	7	3	11	1
Xanthelasma		5		5			5
Pyogenic granuloma	3	1	3	1		4	
Neurofibroma	1	9	7	3		8	2
Fibro mole	14	12	2	18	6	13	13
Angiofibroma	7	3	7	2	1	10	
CTCL	1			1		1	
Total	131	135	82	122	62	138	128

Table 2. Demographic characteristic of malignant skin tumors

Malignant skin tumor	Sex		Age (years old)			Histopathology	
	Male	Female	<30	30-60	>60	Yes	No
Basal cell carcinoma	26	33		11	48	56	
Basosquamouscell carcinoma	4	6		4	6	10	
Squamous cell carcinoma	17	6	1	8	14	23	
Melanoma maligna	6	5	1	6	4	10	
Total	53	50	2	29	72	103	

measures such as sun screen creams (Alwunais and Ahmad, 2016; Hussein, 2005).

It is well documented that non melanoma and melanoma skin cancer is sun exposed injury. In the present study, the most common histological type was Basal cell carcinoma (57,28%) which was also the most common skin cancer in females, whereas Squamous cell carcinoma was (22.33%). Similarly, Basal cell carcinoma is the most common skin cancer in Bahrain, Saudi Arabia, Egypt, and Iran.[6,8,9] It is also a commonest cancer in Asia and Europe. Basal cell carcinoma is the most common form of skin cancer, corresponding to around 75% of malignant skin tumors. Chronic sun exposure which differs between men and women is believed to be the principal cause of these lesions. In our country, majority of people living in rural areas and expose to sun for long time per year and large fraction of the people are farmer, fisherman that had long period sun exposed (Armstrong and Kricker, 2001). Squamous cell carcinoma is the second skin cancer in this study (22.33%) and it also appears as the second skin cancer of adjacent Arab countries, 53.3% in Egypt, 31.1% in Bahrain, 47% in Saudi Arabia, 42.6% in Sudan population, and 26.4% in Jordan (Hussein, 2005; Doherty et al., 2010, Diepgen and Mahler, 2002). On the other hand, Squamous cell carcinoma is the commonest skin cancer in Sudan (42.6%) and it represents 53.6 % in comparison to Basal cell carcinoma 40% in Pakistan. These reverse figures may be related to different etiological factors in Sudan and Pakistan (Haroun et al., 2013).

In this study, melanotic skin cancer was a rare skin cancer. It represented 10,67 % of all skin cancer and

it almost comparable figure was seen in Egyptian population where melanotic skin cancer represents 8% of skin cancer with male preponderance (Hussein, 2005). Melanotic skin cancer constituted 2.5% of all skin cancer in Iran with male predominance (Chatra and Bhat, 2016). The highest incidence rate of cutaneous melanoma maligna was seen in Australia which reach up 50 new cases per/100.000. Melanoma incidence is inversely proportional to darkness of skin. Fairer-skinned Singaporeans of Chinese origin have a higher incidence of melanoma (0.5/100,000) than darker-skinned Indian Singaporeans (0.2/100,000), and white South Africans have a greater incidence of melanoma than those with mixed ancestry and then black South Africans (Baldwin and Dunn, 2013).

Most people in our country are of dark skin which make them more protected from UVR and with low incidence of melanoma. Melanotic skin cancer in darker-skinned people presents in different anatomic locations than in lighter colored people with a greater proportion of acral melanoma and melanoma presenting in non-sun-exposed areas.

5 CONCLUSIONS

Skin tumor is a common tumor in patients living in Padang. The pattern of skin tumor appears nearly similar to the international figures with low incidence of MSC. Regardless how common skin tumor in Padang, these information indicates the need of specific and comprehensive health care and epidemiological studies to investigate skin tumor community related risk factors in Padang and to implement a public strategy for prevention and control.

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REFERENCES

Al-Maghrabi, JA., Al-Ghamdi, AS., Elhakeem, HA., 2014. Pattern of skin cancer in southwestern saudi arabia. *Saudi Medical Journal*, 25(3), 1-3.

Alwunais, K., Ahmad, S., 2016. Pattern of skin cancer at Dammam Medical Complex in Dammam, Saudi Arabia. *Journal of Dermatology & Dermatologic Surgery*, 20(1), 51-54.

Armstrong, B., Kricker, A., 2001. The epidemiology of UV induced skin cancer. *Journal of Photochemistry and Photobiology B: Biology*, 63, (1-3), 8-18.

Baldwin, L., Dunn, J., 2013. Global controversies and advances in skin cancer. *Asian Pacific Journal of Cancer Prevention*, 14(4), 2155-2157.

Chatra, N., Bhat R., 2016. Clinicopathological correlation of skin tumors: A dermatologi's perspective. *Journal of Cancer Research and Therapeutics*, 12, 1124-1126.

Das, N., Gharami, R., Chowdhury, S., Datta, P., Saha, A., 2011. A clinico-histopathological study of appendageal skin tumors, affecting head and neck region in patients attending the dermatology OPD of a tertiary care centre in Eastern India. *Indian Journal of Dermatology*, 56(1), 33.

Diepgen, T., Mahler, V., 2002. The epidemiology of skin cancer. *British Journal of Dermatology*, 146(s61, :1-6.

Doherty, V., Brewster, D., Jensen, S., Gorman, D., 2010. Trends in skin cancer incidence by socioeconomic position in Scotland, 1978–2004. *British Journal of Cancer*, 102(11), 1661-1664.

Haroun, SM., Yassen, AQT., Al-Diab, JMA., Al-Hamdi, K., Habib, OS., 2013. Epidemiology of skin cancer. *Bahrain Medical Bulletin*, 35(4), 1-5.

Hussein, M., 2005. Skin cancer in Egypt: A word in your ear. *Cancer Biology & Therapy*, 4(5), 593-595.