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Characteristics of Seborrheic Dermatitis Patients in Haji Adam Malik Hospital Period 2010-2012

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Abstract : Background: Seborrheic dermatitis is chronic papulosquamous disorder that attacks infants and adults which often found on the body with a high concentration of active sebaceous follicles. **Objective**: To determine the proportion and characteristics of seborrheic dermatitis patients in the Department of Dermatovenereology Haji Adam Malik Hospital from January 2010 - December 2012. **Methods**: Descriptive study using secondary analysis data from the medical records. Seborrheic dermatitis patients. **Results**: A total of 123 seborrheic dermatitis patients visited Haji Adam Malik Hospital from January 2010 - December 2012. The proportion is 0.75 % from total of patient who visit dermatovenereolgy clinics. With the male proportion 55.3 %, aged 46-50 years 13.0 %, Batak ethnicity 32.5 %, high school education / equivalent is 38.2 %, civil work 30.9 %, lesions on the face and head 33.3 %. Treatment of seborrheic dermatitis generally with topical corticosteroids 84.6 %. **Conclusions** : The proportion of patients in the unit seborrheic dermatitis Skin Gender Adam Malik General Hospital from 2010 to 2012 was 0.75 %. Characteristics of patients seborrheic dermatitis in Haji Adam Malik Hospital generally male sex, age 46 - 50 years, Batak ethnicity, education high school / equivalent, work as civil service, most lesions on the face and head. Treatment is generally administered with topical corticosteroid.
Key words : seborrheic dermatitis, proportion, characteristics.

Introduction

Seborrheic dermatitis is chronic papulosquamous disorder that affected baby and also adult, usually found in parts of bodies with active sebaceous folicles and glands, such as face, scalp, ears, upper trunks and flexures (inner thigh, breasts, and armpits).[1-4] This condition seldom found in interscapular, umbilical, perineal, and anogenital area.[1,3]

Skin manifestation in seborrheic dermatitis are erythematous skin covered with brown yellow crust and scabs.[1-5] Excessive peeling of face and scalp can cause negative effects on patient's quality of life, especially women, younger age, and those with higher education level.[1,6]

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The prevalence of seborrheic dermatitis is 3% - 5% in adults and 1% - 5% in general population, although lifetime incidence is very high.[1,4,5,7] Highest prevalence is found in 4th until 7th decades and in 3 months of age until it improved in age 6 to 12 months.[3]

Seborrheic dermatitis is one of many skin manifestations that often found in patient with *human immunodeficiency virus* (HIV) infection and *acquired immunodeficiency syndrome* (AIDS), neurologic disorder such as Parkinson's disease, premature babies and patient with congenital heart disease.[1,6-9]

Seborrheic dermatitis can be classified into two groups, acute form that limited only in 3 months old babies and chronic form in adults.[4,9-12] It often found in male, and seen in all age group and race.[12-15] Data from Cipto Mangunkusumo General Hospital in 2000 until 2002 showed mean incidence of seborrheic dermatitis is 8,3% from clinic visit and ratio between male and female is 1,5 : 1.[3]

A study by Elewski in 2009, found that seborrheic dermatitis often found in more in male than female, this maybe associated with higher androgen stimulation in male than female. Androgen has effect on sebum production.[16] Breuning et al in 2012 found that out of 2201 male adult patients, there are 11% patient with seborrheic dermatitis.[14]

Until today, the propotion of seborrheic dermatitis in H Adam Malik General Hospital Medan for these past years is still unknown therefor author would like to do a retrospective study on seborrheic dermatitis in H Adam Malik General Hospital Medan in 2010-2012.

Methods

This study is a descriptive study, with secondary data analysis from medical record of seborrheic dermatitis patient who came to Department of Dermatology and Venereology in H. Adam Malik General Hospital Medan from 2010 until 2012. Seborrheic dermatitis data consist of age, gender, race, education, occupation, lesions, and medication. The data then tabulated and presented in distribution table.

Result

From January 2010 to December 2012, there are 123 seborrheic dermatitis patient that visit Department of Dermatology and Venereology in H. Adam Malik General Hospital Medan. The total of patient visit of the polyclinic in 2010 is 5.514 persons, in 2011 are 5.641 persons and in 2012 are 5.327 persons. From these data, we found the propotion of seborrheic dermatitis patients in Department of Dermatology and Venereology in H. Adam Malik General Hospital Medan from January 2010 until December 2012 is 0,75%.

Subject characteristics of this study are presented according to year, gender, age, race, education and occupation. From table 1, we found that the highest propotion of patient was in 2011 with 40,7 % (50 patients), followed by 2010 with 35,8 % (44 patients), and in 2012 with 23,6 % (29 patients).

According to table 1, it is known that the percentage of research subject characteristics based on gender, seborrheic dermatitis is found more in male with 55.3% (68 patients) compared to female, 44.7% (55 patients). Age data in this study were not normally distributed so it is grouped into ≤ median age and > median age, which is 48 years old. The highest percentage of research subject characteristics in the age group ≤ 48 years old is 50.4% (62 patients) compared to the age group> 48 years old with 49,6 % (61 patients). Based on the ethnicity, Batak has the highest propotion with 32.5% (40 patients) and the lowest propotion is Aceh, Minang and Simalungun with each 0.8%.

Table 1. Characteristics of seborrheic dermatitis in Dermatology and Venereology Polyclinic H. Adam Malik General Hospital Medan 2010 - 2012

No.	Characteristic	Subject	
		n	%
Gender			
1	Male	68	55,3
2	Female	55	44,7
Age			
1	≤ 48 years old	62	50,4
2	> 48 years old	61	49,6
Ethnicity			
1	Aceh	1	0,8
2	Batak	40	32,5
3	Jawa	26	21,1
4	Karo	35	28,5
5	Mandailing	10	8,1
6	Melayu	7	5,7
7	Minang	1	0,8
8	Nias	2	1,6
9	Simalungun	1	0,8
Education			
1	Uneducated/Primary School	20	16,3
2	Middle School	15	12,2
3	High School	47	38,2
4	Undergraduate	41	33,3
Occupation			
1	Housewive	17	13,8
2	Student	22	17,9
3	Retired	21	17,1
4	Farmer	5	4,1
5	Civil worker	38	30,9
6	Army	1	0,8
7	Entrepreneur	19	15,4

The highest percentage of research subject characteristics based on their education is high school with 38.2% (47 patients) compared to undergraduate education with 33.3% (41 patients), uneducated/primary school 16.3% (20 patients), and junior high with 12.2% (15 patients). Whereas, the highest percentage of occupation is civil worker, which were 30.9% (38 patients), and the lowest was army, which was 0.8% (1 patient).

Table 2. Distribution of skin lesion in subjects

No.	Location	Lesion				Total	%
		Yes		No			
		n	%	n	%		
1	Face	41	33,3	82	66,7	123	100
2	Back	24	19,5	99	80,5	123	100
3	Neck	10	8,1	113	91,9	123	100
4	Scalp	4	3,3	119	96,7	123	100
5	Ear	14	11,4	109	88,6	123	100
6	Axilla	2	1,6	121	98,4	123	100
7	Arm	5	4,1	118	95,9	123	100
8	Head	41	33,3	82	66,7	123	100
9	Thigh	16	13,0	107	87,0	123	100
10	Genital	17	13,8	106	86,2	123	100

Table 2 describes the percentage of research subjects based on the location of the lesions. On the face, 82 subjects were found without skin lesions (66.7%), compared with skin lesions (33.3%). On the back area, we found 80.5% (99) subjects without skin lesions compared to subjects with skin lesions, with 19.5% (24 patients). On the neck area, we found 91.9% (113) subjects without skin lesions compared to subjects with skin lesions, with 8.1% (10 patients). On the scalp more subjects are found without skin lesion (96.7% or 119 patients). There are more subjects without skin lesion on the ear 88.6% (109 subjects); armpit with 98.4% (121 subjects); arm with 95.9% (118 subjects); head with 66.7% (82 subjects); thighs with 87.0% (107 subjects); genital with 86.2% (106 subjects).

Table 3. Distribution of treatment in subjects

No	Medicine	Treatment				Total	%
		Yes		No			
		n	%	n	%		
1	Hidrokortison *cream* 1%	41	33,3	82	66,7	123	100
2	Hidrokortison *cream* 2,5%	36	29,3	87	70,7	123	100
3	Inerson *cream*	45	36,6	78	63,4	123	100
4	Interhistin tab	86	69,9	37	30,1	123	100
5	Tupepe *cream*	1	0,8	122	99,2	123	100
6	Ketokonazole *cream* 2%	14	11,4	109	88,6	123	100
7	Metilprednisolon tab	6	4,9	117	95,1	123	100
8	Ketomed scalp sol	26	21,1	97	78,9	123	100
9	Miconazole *cream*	8	6,5	115	93,5	123	100
10	Cetirizine tab	14	11,4	109	88,6	123	100
11	Fuson *cream*	3	2,4	120	97,6	123	100
12	Selsun *shampoo*	6	4,9	117	95,1	123	100

More subjects did not use Hydrocortisone cream 1% (66,7 %) compared with subjects who used the medication (33,3 %). There are 70,7 % (87) subjects who did not use Hydrocortisone *cream* 2,5%, compared with subjects who used the cream (29,3 %). The percentage of subjects who used Inerson cream is 36,6 % (45) subjects and it is lower than subjects who did not use Inerson cream. There are more subjects who did not use the medication such as Interhistine oral with 69,9 % (86 subjects); Tupepe cream with 99,2 % (122 subjects); Ketokonazole cream 2% with 88,6 % (109 subjects); Metilprednisolon oral with 95,1 % (117 subjects); Ketomed scalp with 78,9 % (97 subjects); Miconazole cream with 93,5 % (115 subjects); Cetirizine oral with 88,6 % (109 subjects); Fuson cream with 97,6 % (120 subjects); Selsun shampoo with 95,1 % (117 subjects).

Discussion

Our study showed seborrheic dermatitis proportion in Department of Dermatology and Venereology, H. Adam Malik General Hospital Medan, from January 2010 until December 2012 is 0,75 % or 7,5 ‰, which means that every 1000 patients in Department of Dermatology and Venereology, H. Adam Malik General Hospital Medan, from 2010 until 2012, there are 7 orang pasien dermatitis seboroik. Seborrheic dermatitis is one of common disorder that can be found with incidence of 2% to 5% in the world.[5]

Seborrheic dermatitis is often found in men than women, which probably by androgen that stimulate sebum production.[16] This is consistent with the data obtained from the study, where seborrheic dermatitis is more common in men. This disorder is often found in teenagers, young adults, and adults older than 50 years old. However, a survey from Australia on 1.116 children age 11 days to 5 years old showed that the overall prevalence for dermatitis seborrheic in boys is 10,0% and 9,5% in girls. This showed that the condition is also often found in early childhood.[16] Seborrheic dermatitis occurs in two peaks based on age, in newborns up to three months of age and in adults aged 30-60 years.[8]

Our data showed that seborrheic dermatitis is mostly found in Bataknese. However, seborrheic dermatitis can be found in all ethnicity, which means that this disorder is not specific to certain ethnic group.[1,4,5,12,13]

According to subject's occupation, there are more subjects that work as civil worker. Civil worker or worker in general are mostly adult and most of them aged more than 48 years old. The incidence of seborrheic dermatitis based on the work in this study is associated with the age of the subjects.

From the subjects, seborrheic dermatitis is mostly found on the face and scalp area. Lipid sebum are important for *Malassezia* proliferation and synthesis of early proinflammatory factors, therefore certain amount of sebum is needed to create suitable condition for the development of seborrheic dermatitis. Seborrheic dermatitis lesions are often found in part of skin with abundance sebum glands. [12-16] The lesions are mainly develops in areas with high sebum production such as the scalp, face, external ear, retroauricular area and pre-sternal area, eyelids and body folds.[1-5]

Adults with seborrheic dermatitis is usually used topical steroid once or twice a day and used shampoo as adjuvant therapy.[3,5,8,9] Low potency topical steroid can be effective in treating seborrheic dermatitis in infant or adult in flexural area or recalcitrant seborrheic dermatitis in adults.[1-5]

Conclusion

The number of seborrheic dermatitis patients who visited H. Adam Malik General Hospital Medan in the period of January 2010 - December 2012 was 123 patients with the proportion in 2010, 2011 and 2012 of 0.79%, 0.88% and 0.54% respectively. Characteristics of the study subjects were generally male, age $\leq$ 48 years, Bataknese, high school / equivalent education, civil worker, with most lesions on the face and head. Treatment of seborrheic dermatitis is generally topical corticosteroid, topical antifungal and oral anti histamine.

References

1. Collins CD, Hivnor C. Seborrheic dermatitis. Dalam : Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, Wolff K. Editor. Fitzpatrick's Dermatology in General Medicine. Edisi ke-8. New York. McGraw.Hill Companies;2012.h1531-75.
2. Djuanda. Dermatosis Eritroskuamosa. In: Djuanda A, Hamzah M, Aisyah S. Editors. Ilmu Penyakit Kulit dan Kelamin. Jakarta. Balai Penerbit FK UI; 2015. h.213-33.
3. Kurniati DD. Dermatitis seboroik: Gambaran klinis. In: Tjarta A, Sularsito SA, Kurniati DD, Rihatmaja R. Editors. Metode Diagnostik dan Penatalaksanaan Psoriasis dan Dermatitis Seboroik. Jakarta. Balai Penerbit FK UI; 2003. h.53-59
4. Picardo M, Cameli N. Seborrheic dermatitis. In: Williams H. Editor. Evidence-based Dermatology. London. Blackwell Publishing; 2008. p. 164-70.
5. James WD, Berger TG, Elston DM. Editors. Andrew's Diseases of The Skin Clinical Dermatology. Edisi ke-12. Canada. Sauders Elsivier; 2015
6. Naldi L, Rebora A. Seborrheic dermatitis. The New England Journal of Medicine. 2009; 360 (4): 387-96. DOI: 10.1056/NEJMcp0806464
7. Chatzikokkinou P, Sotiropoulos K, Katoulis A, Luzzati R, Trevisan G. Seborrheic dermatitis – an early and common skin manifestation in HIV patients. Acta Dermatovenerologica Croatica. 2008;16(4):226-30.
8. Sampaio AL, Vargas TJ, Nunes AP, Mameri AC, Silva MR, Carneiro SC. Seborrheic dermatitis. Anais Brasileiros de Dermatologia . 2011; 86(6): 1061-74.
9. Mokos ZB, Kralj M, Juzbacic AB, Jukic IL. Seborrheic dermatitis : An update. Acta Dermatovenerologica Croatica. 2012; 20(2): 98-104.
10. Del rosso JQ, Kim GK. Seborrheic Dermatitis and Malassezia species: how are they related?. Journal of Clinical Aesthetic Dermatology. 2009; 2 (11): 14-7.
11. Berk T, Schenfield N. Seborrheic dermatitis. Continuing Education Credit. 2010; 35(6): 348-52.
12. Schwartz JR, Messenger AG, Tosti A, Todd G, Hordinsky M, Hay JR, et all. A comprehensive pathophysiology of dandruff and seborheic dermatitis-towards a more precise definition of scalp health. Acta Dermato Venereologica.2012;92:1-7.
13. Del rosso JQ. Adult Seborrheic dermatitis: A status report on practical topical management. Journal of Clinical Aesthetic Dermatology. 2011; 4(5): 32-8. doi: 10.2340/00015555-1382.
14. Breunig JA, Almeida HL, Duquia RP, Souza PRM, Staub HL. Scalp seborrheic dermatitis: prevalence and associated factors in male adolescents. *International Journal* of *Dermatology* . 2012; 51: 46-9.
15. Gustafson CJ, Davis SA, Feldman SR. Complete approaches to seborrheic dermatitis. Dermatologist. 2012:1-3.
16. Eleweski BE. Safe and effective treatment of seborrheic dermatitis. Therapeutics for the Clinician. 2009; 83: 333-38.
17. Koc E, Arca E, Kose O, Akar A. An open, randomized, prospective, comparative study of topical pimecrolimus 1% cream and topical ketoconazole 2% cream in the treatment of seborrheic dermatitis. Journal of Dermatological Treatment. 2009; 20(1):4-9.

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