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A Clinical Study on the Prevalence of Skin Diseases in Adult Patients - focused on an ageing society

In-Hwa Choi, O.M.D.
Depart. of Ophthalmology, Otorhinolaryngology and Dermatology
KyungHee University, East-West Neo Medical Center

성인 피부질환 발생빈도에 대한 임상적 연구 - 고령화 사회를 중심으로

최 인 화

배경 : 의과학과 사회-경제학의 발전은 인간 수명 연장에 지대한 공헌을 해 왔다. 그러나 결과적으로 피부 질환으로 고생하는 노인 인구도 증가하였다. 본 연구에서는 동국대학교 한방 안이비인후피부과에 피부질환을 주소증으로 내원한 성인 환자들을 대상으로 임상 양상을 조사해 보고 고령사회에서 어떻게 한방 피부과 의료 수요 변화에 대처하고 발전해 나아갈 수 있을지 그 방법을 모색해 볼 수 있는 근거 자료로 활용하기 위해 수행하였다.

연구방법 : 2002년 1월부터 2004년 12월 까지 3년 동안 동국대학교 한방 안이비인후피부과에 피부 질환을 주소증으로 내원한 319명의 환자를 대상으로 하였다. 그들을 내원시기, 연령, 성별로 나누어 질환별 분포를 조사하였다. 통계분석은 χ^2 test(Window, SPSS 11.0)를 사용하였고 p <.05를 유의수준으로 하였다.

결과 : 2002년부터 2004년 까지 질환별 분포를 살펴보면 습진 21.9%, 소양증 20.4%. 여드름 16.9%,로 나타났다. 2002년에는 습진 17.0%, 소양증 16.0%, 여드름이 14.9%였다. 2003년에는 소양증 34.2%, 두드러기가 23.3%, 습진이 17.1%였다. 2004년에는 습진 61.4%, 여드름 21.1%, 소양증 15.8%였다. 이들 결과는 통계적으로 유의한 차이를 보였다($\chi^2 = 54.135^{***}$, $p = .000$, $df = 20$).

남자에서는 습진이 25.0%로 가장 많았고 소양증 19.5%, 두드러기 12.5%, 지루성 피부염 11.7%로 나타났다. 여자에서는 여드름이 22.0%로 가장 많았고 소양증 20.9%, 습진 19.9%였다. 이들 결과는 통계적으로 유의한 차이를 보였다($\chi^2 = 19.839^{*}$, $p = .031$, $df = 10$).

20대 환자에서는 여드름이 24.1%로 가장 많았고 습진과 소양증이 각각 19.5%였다. 30대 환자군에서는 습진이 30.3%였고 소양증이 19.1%였다. 40대에서는 소양증이 28.8%였고 지루성 피부염이 16.0%였다. 50대에서는 습진이 26.7%였고 60세 이상의 그룹에서는 습진이 50.0%, 바이러스 질환과 소양증이 각각 15.0%였다. 이들 결과는 통계적으로 유의한 차이를 보였다($\chi^2 = 74.995^{**}$, $p = .001$, $df = 40$).

결론 : 상대적으로 50세 이상 연령층의 대상 환자 수가 많지 않은 원인은 여러 가지 분석이 가능할 것으로 생각.

된다. 연령에 따라 피부질환이 다른 양상을 보임을 고려할 때 노인층의 신체적, 경제적, 사회적 특성을 이해하고 이에 따른 효과적이고 사회-경제학적 부담을 최소할 수 있는 한방 치료 영역의 확대 및 개발이 필요할 것으로 사려된다.

Key words : prevalence, skin disease, adult patients

Introduction

It is axiomatic that average life span is prolonged in proportion to the advance of socio- economic improvements and medical science. Consequently, the number of elderly patients with skin diseases is increasing[1-3]. The proportion of Koreans who are elderly is large and rapidly increasing. At present nearly 6% of the population is 65 years or older, and this figure is estimated to reach 14% in 2030[4]. The dermatologic needs of elderly persons remain poorly defined. In addition, essentially all older persons have cosmetically bothersome skin changes, most of which are attributable to lifelong sun exposure[3].

Mechanistically aging is widely assumed to result in part from a genetically determined program and in part from a endogenous and exogenous, with both processes expressed at the cellular level. The skin has proved particularly useful for both clinical and laboratory-based studies of human aging partly because of its accessibility and partly because of the unique opportunity it presents to study the impact of environmental influences on intrinsic aging[5].

Methods

I studied 319 adult patients with complaints of skin diseases who had visited my hospital from January 2002 through December 2004. They were divided according to visiting time, their age and sex. The elderly group had their skin diseases analyse and compare to the younger group's. Statistical analysis was performed using the χ^2 test(Window, SPSS 11.0). Statistical significance was achieved if the probability was less than 5 %(p <.05).

Results

The common diseases were studied: eczema(21.9%); pruritus(20.4%); acne(16.9%) from 2002 through 2004. In 2002: pruritus(17.0%); eczema(16.0%); acne(14.9%). In 2003: pruritus(34.2%); urticaria(23.3%); eczema(17.1%). And in 2004, eczema(61.4%); acne(21.1%); pruritus(15.8%). These results showed significant differences statistically(χ^2 = 54.135***, p = .000, df = 20).

교신저자: 최 인화, 서울시 강동구 상일동 149 경희대학교 동서신의학병원 한방안이비인후피부과 (Tel:02-4406235, Fax: 02-440-7143, E-mail: inhwajun@hanmail.net)

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Table 1. Distribution of Skin Disease According to the Year

Disease Year	Acne	Eczema	Urticaria	Viral Infection	Seborrheic dermatitis	Poriasis	Fungal Infection	Pruritus	Pigment ation	Alopecia	.Ohers	total
2002	14(14.9)	15(16.0)	10(10.6)	3(3.2)	13(13.8)	3(3.2)	4(4.3)	16 (17.0)	7(7.4)	3(3.2)	6(6.4)	94(29.5)
2003	8(11.0)	12(17.1)	17(23.3)	5(6.8)	4(5.5)	0(0.0)	0(0.0)	25 (34.2)	1(1.4)	0(0.0)	1(1.4)	73(22.9)
2004	32(21.1)	43(61.4)	16(10.5)	7(4.6)	6(3.9)	3(2.0)	3(2.0)	24 (15.8)	3(2.0)	10(6.6)	5(3.3)	152 (47.6)
total	54(16.9)	70(21.9)	43(13.5)	15(5.0)	23(7.2)	6(1.9)	7(2.2)	65 (20.4)	11(3.4)	13(4.1)	12(3.8)	319 (100.0)

$\chi^2 = 54.135^{***}$ $p = .000$ $df = 20$

Table 2. Distribution of Skin Disease According to Sex

Disease Sex	Acne	Eczema	Urticaria	Viral Infection	Seborrheic dermatitis	Poriasis	Fungal Infection	Pruritus	Pigmen t-ation	Alopecia	Others	total
Male	12(9.4)	32(25.0)	16(12.5)	6(4.7)	15(11.7)	4(3.1)	3(2.3)	25 (19.5)	4(3.1)	8(6.3)	3(2.3)	128 (40.1
Female	42 (22.0)	38(19.9)	27(14.1)	9(4.7)	8(4.2)	2(1.0)	4(2.1)	40 (20.9)	7(3.7)	5(2.6)	9(4.7)	19 1(59.9)
total	54 (16.9)	70(21.9)	43(13.5)	15(4.7)	23(7.2)	6(1.9)	7(2.2)	65 (20.4)	11(3.4)	13(4.1)	12(3.8)	319 (100.0)

$\chi^2 = 19.839^{*}$ $p = .031$ $df = 10$

Table 3. Distribution of Skin Disease According to Age

Disease Age	Acne	Eczema	Urticaria	Viral Infection	Seborrheic dermatitis	Poriasis	Fungal Infection	Pruritus	Pigment -ation	Alopecia	Others	total
20's	42 (24.1)	34(19.5)	21(12.1)	4(2.3)	10(5.7)	3(1.7)	4(2.3)	34 (19.5)	6(3.4)	6(3.4)	10(5.7)	174 (54.5)
30's	9 (10.1)	27(30.3)	14(15.7)	2(2.2)	9(10.1)	2(2.2)	1(1.1)	17 (19.1)	2(2.2)	4(4.5)	2(2.2)	89(27.9)
40's	3 (12.0)	1(4.0)	1(4.0)	3(12.0)	4(16.0)	1(4.0)	0(0.0)	7(28.8)	2(8.0)	0(0.0)	0(0.0)	25(7.8)
50's	0(0.0)	4(26.7)	3(20.7)	2(13.3)	0(0.0)	0(0.0)	2(13.3)	3(20.0)	0(0.0)	1(6.7)	0(0.0)	15(4.7)
60's ≤	0(0.0)	4(25.0)	1(6.3)	4(25.0)	0(0.0)	0(0.0)	0(0.0)	4(25.0)	1(6.3)	2(12.5)	0(0.0)	16(5.0)
total	54 (16.9)	70(21.9)	43(13.5)	15(4.7)	23(7.2)	6(1.9)	7(2.2)	65 (20.4)	11(3.4)	13(4.1)	12(3.8)	319 (100.0)

$\chi^2 = 74.995^{**}$ $p = .001$ $df = 40$

The disorders most prevalent in men were: eczema(25.0%); pruritus(19.5%); urticaria(12.5%); seborrheric dermatitis(11.7%). The common diseases of the women's group were observed in the following order; acne(22.0%); pruritus(20.9%); eczema(19.9%). These results showed significant differences statistically (χ^2 = 19.839*, p = .031, df = 10).

The most frequent skin diseases for those in their 20's were acne(24.1%), eczema and pruritus(19.5%); In the 30's: eczema(30.3%), pruritus(19.1%); the 40's: pruritus(28.8%), seborrheric dermatitis(16.0%); 50's: eczema(26.7%); and the 60 plus eczema, viral disease and pruritus(25.0%). These results showed significant differences statistically(χ^2 = 74.995**, p = .001, df = 40).

Discussion

Starting around 1970, in Korea the problems of the aged became an object of public concern. That time saw the rapid industrialization of our society. In 2000, the population ratio of those over 65 had reached 7.2% and our society became an aging society among the national classification according to the aged person component ratio by the UN.

In the first 30 years of the 21st century, it is expected that the increasing proportion of aged persons will be very fast compared to any other country. After the middle of 2010, the proportion of the aging person population will have reached up to 14% and Korea will be a truly 'aged' society[4].

It's not always guaranteed the increasing number and proportion of aged people will bring all the problems associated with aging. But it does depend on whether the general social systems and welfare policies could cope with the aging society based on policies in advanced countries. The problems of the aged are mainly regarded as 4, poverty, disease, alienation(isolation) and loss of their role. In medicine, the aged person has a high risk of physical and mental disease and reduced recovery power. And as time goes by the proportion of aged person with health problems will increase. As a result, the aged person ratio of out patients and in patients will increase and it will further stress the importance of Geriatric medicine[6].

As provided by WHO, elderly is defined as those from 60 to 75- years old, old elderly as from 76 to 89, very old elderly: over 90. Many geriatricians have classified them into: young-old, from 65 to 74 year; old-old, from 75 to 84; and oldest- old, over 85.

We can better understand geriatric diseases not as the names of diseases but the deficiency of function. So we can describe geriatric diseases as the 3M's: the diseases of Mobility, Mentation and Micturition. And also the multiple I's, that means Immobility, Instability, Incontinence, Intellectual impairment, Infection, Impairment of vision and hearing, Isolation, Inanition, Insomnia, Iatrogenesis, Impotence, Immune deficiency; in short 5 I's, those being: mental Incompetence, Incontinence, Immobility, Iatrogenesis and Impaired homeostasis[7].

We can explain more about the characteristics

of the clinical features of geriatric diseases. First: the geriatric diseases tend to break out as many diseases simultaneously. Second, the symptoms and signs of those are not clear and typical. Sometimes there are no symptoms and changes. Third, geriatric diseases are very hard to recover from completely because they are chronic and degenerative diseases. Fourth, most of them are accompanied by impairment of function. And last, we should consider about not only in the view of the medical factor but also socio-environmently, psychologically and economically in order to treat them effectively[8].

The dermatologic needs of elderly persons remain poorly defined. In addition, essentially all older persons have cosmetically bothersome skin changes, most of which are attributable to lifelong sun exposure[9].

I'd like to examine the pattern of skin disease in adult patients in accordance with their age through the retrospective examination of their charts and selected according to their primary skin complaints. I studied 319 adult patients with complaints of skin diseases who had visited my hospital from Jaunary 2002 through December 2004.

The distribution of patients according to their age was as follows ; Over 60 years and from 50 to 59, 5%, from 40 to 49, 8%, from 30 to 39, 28% and from 20 to 29, 54%. The elderly werenn't many. Perhaps One of the reasons was due to their economic problems. And, they had little understanding of their skin diseases.

The following common diseases were studied: eczema(21.9%); pruritus(20.4%); and acne(16.9%) from 2002 through 2005. In 2002: pruritus(17.0%); eczema(16.0%); acne(14.9%). In 2003: pruritus(34.2%); urticaria(23.3%); and eczema(17.1%). And in 2004, eczema(61.4%); acne(21.1%); and pruritus(15.8%). These results showed significant differences statistically(χ^2 = 54.135***, p = .000, df = 20).

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Mcfadden reported the prevalence of skin conditions in 257 elderly new outpatients in Norway, 1989. Five conditions dominated the list of led by seborrheic keratosis(15.6%), basal cell carcinoma(13.6%), solar keratosis(13.2%) and leg ulcer(9.3%)[10].

In Korea, Go et al. observed 1,420 elderly patients, over the age of 65, who visited the dermatology of 5 hospitals. They noted the frequent skin diseases were herpes zoster and postherpetic neuralgia(12.3%), fungal infection

(11.3%), pruritus(9.2%), contact dermatitis(6.8%) and seborrheic dermatitis(5.7%)[11].

Their results are a little different from mine. I consider that reason are the difference of race, local, climate, prevalence of disease, condition of visiting clinic, perception of dermatoses. In addition to most of patients with skin diseases in Korea tend to visit Oriental medicine later than pharmacy and western medical hospital and clinic.

Conclusion

Dermatologic problems, especially eczema, pruritus are very common in the elderly. It is a very different pattern from the younger group's. Therefore we have to better consider more effective management and treatment for them; especially further dermatologic studies including substantial medical care. Usually Oriental medicine is good at treating chronic diseases and less harmful than other forms of treatment. However comparatively speaking, the number of elderly patients visiting the Oriental dermatology clinics are fewer than younger patients. One reason may be result their economic status. They used to worry about the treatment fee and expected the efficacy of treatment would show results in a short time because they were more familiar with western medicine modes. If we couldn't give them satisfaction, they gave up easily. The elderly especially have had more problems compared to younger. For instance, economic, mobility and degeneration due to aging, and so on. Regardless, it is important that we seriously consider developing a new system to help the elderly with dermatoses. I expect it will be one of good method for them to use and expand oriental external application.

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