The 21st Annual Meeting of The Korean Society for Psoriasis

PROGRAM BOOK

September 23, 2017

Bear-Hall, Seoul, Korea

Organized by
The Korean Society for Psoriasis
Co-sponsored by
The Korean Dermatological Association

인사말씀

대한건선학회의 제21차 연례 학술대회에 여러분을 초대합니다.

건선분야는 올해도 국내외로 숨 가쁘게 달려가고 있습니다.
새로운 병인과 치료방법에 대한 연구결과가 계속 발표되고 있을 뿐만 아니라, 올 6월부터는 중증건선 산정특례제도가 도입되는 등, 건선을 앓고 있는 환자분들께 더 좋은 진료를 제공하기 위하여 알아두어야 할 것들이 많습니다. 대한건선학회에서는 이러한 시대의 변화에 발맞추어 이번 연례 학술대회 프로그램을 준비하였습니다.

Austria Vienna 대학의 Georg Stingl 교수를 초청하여 건선의 면역학적 병인에 대한 최신 지견을 담은 특별강연과 북경 청화대학의 Yi Zhao교수를 초청하여 "The long way to a successful management of psoriasis" 라는 연제로 중국에서의 건선치료 현황을 들어보는 시간을 마련하였습니다.

또한 건강보험공단과 건강보험심사평가원의 실무진을 초청하여 최근에 도입된 중증건선 산정 특례제도 적용에 관련된 여러 가지 궁금한 점을 알아보고 향후의 정책방향에 대해 들어보는 정책포럼 세션도 준비하고 있습니다. 만성 염증성 질환인 건선을 성공적으로 치료하려면 의학적 치료뿐만 아니라 건선 질환에 대한 적절한 환자 교육이 필수적이기에 대한건선학회에서는 2013년부터 "건선학교" 프로그램을 전국 주요 거점병원을 중심으로 시작하여 올해는 전국 19개 병원에서 표준교안에 의한 병원단위 "건선교실"을 열고 있습니다. 정책포럼 세션에서는 건선환자의 교육을 위하여 그동안 진행해 온 학회의 사업에 대하여도 보고드릴 예정입니다.

올해는 한 해 동안 회원 여러분들께서 정진하여 얻은 건선 연구의 결실을 발표하는 시간과 아울러 매일매일 건선 환자를 진료하면서 만나게 될 수 있는 어려운 상황들을 실제 증례를 통하여 토론하며 최선의 해결책을 함께 만들어 가는 시간을 준비하여 건선분야에 관심을 기울이고 있는 젊은 연구자들에게 도움을 드리고자 합니다.

모쪼록, 이번 학술대회에 참석하셔서 보다 나은 건선연구와 진료를 위한 시간을 함께 하여 주십시오.

2017년 9월

대한건선학회 회장 **송 해 준**

INFORMATION

◆ **등록비** (정회원 연회비 포함)
- 사전등록 5만원, 현장등록 6만원
- 전공의 및 65세 이상 회원 면제

◆ **연수팽점 :** 5점

◆ **Official Language**

모든 발표자료는 영어로 작성되어야 하며, 연제 발표 시 국내 연자는 한국어를 사용하고 외국인 연자는 영어를 사용하여 발표합니다.

◆ **학회장: 베어홀**

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PROGRAM

09:30-09:50 Registration

09:50-10:00 Opening Address — **SONG Hae Jun**, President of KSP
Congratulatory Message — **CHOI Jee-Ho,** President of KDA

10:00-11:00 Free Communication I — **Chairs: KIM Kwang-Joong** *(Hallym Univ.),* **KIM Myeung Nam** *(Chung-Ang Univ.)*

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[1]Department of Dermatology, Cutaneous Biology Research Institute, Yonsei University College of Medicine
[2]Department of Epidemiology and Health Promotion, Institute for Health Promotion, Graduate School of Public Health, Yonsei University
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[1]*Department of Dermatology, Seoul National University College of Medicine*

[2]*Public Health Medical Service, Boramae Medical Center, Seoul National University College of Medicine*

[3]*Institute of Health Policy and Management, Medical Research Center, Seoul National University*

[4]*Department of Health Policy and Management, Seoul National University College of Medicine*

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Department of dermatology, National Medical Center, [1]Inshine Dermatology Clinic

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[1]Institute of Human-Environment Interface Biology, Medical Research Center, Seoul National University, [2]Division of Gastroenterology, Department of Internal medicine, SMG-SNU Boramae Medical Center, Department of Dermatology, SMG-SNU Boramae Medical Center

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17:30-18:00 General Assembly

Free Communication I

FC 1-1

A Case of Disseminated Tuberculosis in Anti-Tumor Necrosis Factor Treated Psoriasis Patient with a Negative Reaction to Initial Tuberculosis Screening

BAE Joo-Yoon, LEE Jae-In, KIM Hong-Lim, SUH Hyun-Yi
JUNG Hye-Jung, PARK Mi-Youn, YOUN Jai-Il[1], AHN Ji-Young

Department of Dermatology, National Medical Center, [1]Inshine Dermatology Clinic

The use of new biological drugs has brought new therapeutic weapons in the treatment of chronic diseases, thus improving quality of life for patients. However, there is no doubt that there has been an increase in the appearance of many types of adverse effects, among which is the risk for opportunistic granulomatous infections. In the case of tuberculosis, the risk of developing this disease during the use of these treatments is quintupled.

A 62-year-old man diagnosed with plaque psoriasis in 2001. In May 2016 Adalimumab, an anti-TNF-α antibody, was started. Prior to initiation of Adalimumab treatment screening tests revealed a normal chest radiograph and a negative interferon gamma release assays(IGRA). Seven month after initiation of treatment, the patient developed cough, dyspnea and fever. Computed tomography scanning of the chest revealed disseminated tiny nodule in both lungs and lymph node enlargement and X pert MTB/RIF (Mycobacterium tuberculosis/rifampin [RIF] resistance) confirmed MTB. His Adalimumab injections were discontinued and he was started TB medication.

The introduction of screening protocols for LTBI has led to a significant reduction in the rates of TB reactivation with anti-TNF drugs; however the sensitivity of IGRA remains unclear, and new infection during anti-TNF treatment may still occur, this case also can not rule out the possibility of a new infection. In conclusion, TB remains an important problem in anti-TNF treated patients, especially in countries with moderate or high prevalence of TB.

FC 1-2

Clinical Manifestation of Psoriasis with Latent Tuberculosis Infection

HUR Min Seok, HONG Joo Ran, CHEON Hye In, CHOI Byung Gon, HAN Song Hee, KIM Min Jung, YOUN Hae Jeong, LEE Yang Won, CHOE Yong Beom, AHN Kyu Joong

Department of Dermatology, Konkuk University School of Medicine

Introduction: Latent tuberculosis infection (LTBI) is a growing concern restricting biologics in treatment of psoriasis. We aimed to evaluate the clinical manifestations of psoriasis and associative factors related with LTBI in a highly prevalent country.

Materials/Methods: This retrospective study performed at Konkuk University Hospital in Korea included 300 patients conducted interferon - γ release assay (IGRA). We obtained clinical data including age, sex, duration of disease, smoking, history of TB contact, body mass index (BMI), arthritis, psoriasis area severity index (PASI) and nail involvement. Additionally, we performed chest radiography and laboratory studies.

Results: Old age ($p < 0.001$) and psoriatic arthritis ($p < 0.001$) were significantly associated with LTBI in psoriatic patients, although other factors such as duration of disease, smoking, BMI and PASI showed no significant difference between the two groups. LTBI patients showed a difference in cytokine properties resulting in higher serum cytokine levels of interleukin (IL) -6, -8 and -23A compared to patients without LTBI ($p = 0.014$ with respect to IL-6, $p = 0.025$ with respect to IL-6 and $p = 0.004$ with respect to IL-23A).

Conclusions: Tuberculosis is a chronic inflammatory disease, which has the provability of continuous stimulation on immunity resulting in change of cytokine expression. Patients diagnosed with psoriasis with concomitant LTBI showed elevated serum levels of inflammatory cytokines including IL-6, -8 and 23A compared to those without TB infection. Based on these results, it can be concluded that tuberculosis limits the use of biological treatment and also affects the clinical manifestations of psoriasis such as psoriatic arthritis.

FC 1-3

Methotrexate Induced Epidermal Necrosis in a Patient with Psoriasis

JEONG In Jae, LEE Hee Jung, YOON Moon Soo, KIM Dong Hyun

Department of Dermatology, CHA Bundang Medical Center, CHA University

Methotrexate (MTX) is currently used as a first-line treatment for moderate to severe psoriasis. Although relatively safe and generally well tolerated, MTX can induce severe side effects, including hepatitis, bone marrow suppression, gastrointestinal disorders, renal failure, and cutaneous reactions. MTX-induced epidermal necrosis (MEN) is a rare but life-threatening cutaneous reaction that mimics Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN).

The 76-year-old woman presented with desquamative and erosive patches on the whole body which had occurred 2 days ago. The patient also complained of ulceration in the oral cavity and discomfort within the throat. History taking revealed that the patient had been diagnosed with psoriasis20 years ago and she started to take oral MTX 7.5mg daily without folic acid supplementation 1 week before development of present skin eruption to control the recent psoriasis flare-up at private clinic. Pancytopenia and elevated serum creatine were observed in laboratory test and folic acid level was decreased. MEN due to daily MTX intake was suspected and MTX was discontinued immediately. For mucocutaneous erosion and pancytopenia, leucovorin injection and conservative treatment were performed. Two weeks later, the patient was discharged with almost cleared skin lesions.

Herein, we report a case of MEN in a patient with psoriasis, which highlights the need for awareness of MTX toxicity mimicking SJS and TEN.

FC 1-4

Risk of Cancers in Patients with Psoriasis in Korea: A 17-Year Nationwide Prospective Cohort Study (The Korean Cancer Prevention Study)

LEE Jae Won[1,3], JUNG Keum Ji[2,3], KIM Tae-Gyun[1], LEE Minseok[1], KIM Jemin[1], JEE Sun Ha[2,4], LEE Min-Geol[1,4]

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[3]Co-first authors, [4]Corresponding authors

The risk of cancer in patients with psoriasis has caused a concern due to the chronic inflammatory nature of the disease and the use of immunosuppressive treatments. Although psoriasis has been reported to be associated with cancers in Caucasians in previous studies, the association among Asians has yet to be established.

The objective of this study was to compare the risk of cancers in patients with psoriasis compared to patients without psoriasis.

1,733,620 Koreans who received health insurance from the National Health Insurance System and had a medical evaluation every two years between 1997 and 2000 were prospectively followed. The incidences of cancers were analyzed with Cox proportional hazard model and standardized to the age distribution in the 2005 Korean population. The hazard ratios of incidences of cancers were adjusted for age, smoking status, alcohol consumption, exercise status, body mass index, hypertension and diabetes.

The incidence of overall cancers was significantly increased in patients with psoriasis compared to general population with the adjusted hazard ratio (aHR) of 1.08 (95% CI = 1.00-1.18). The aHR for stomach cancer was 1.32 (95% CI = 1.08-1.58), which was driven by the increased risk in male patients with psoriasis (aHR=1.39, 95% CI = 1.14-1.71), while female subgroup showed no significant association. The risk of rectal cancer among female patients was significantly higher in psoriasis group compared to control group (aHR=1.77, 95% CI = 1.07-2.94). The aHR for non-Hodgkin lymphoma was 1.67 in psoriasis group compared to control group, which showed statistically borderline significance (95% CI = 0.97-2.88). No significant association was seen with other cancers of the solid organs or leukemia.

In conclusion, the association between psoriasis and cancer was present in our cohort of patients with psoriasis in Korea. This association was primarily driven by stomach cancer, rectal cancer and non-Hodgkin lymphoma.

FC 1-5

Successful Dose Tapering of Adalimumab by Increasing Interval Between Doses in Treatment of Psoriasis

KIM Hong-Lim, LEE Jea-In, BAE Joo-Yoon, SUH Hyun-Yi, JUNG Hye-Jung, AHN Ji-Young, PARK Mi-Youn, YOUN Jai-Il[1]

Department of dermatology, National Medical Center, [1]Inshine Dermatology Clinic

During the past 2 decades, a more profound insight in the pathogenesis of psoriasis has led to the development biological treatments. Adalimumab is a TNF (tumor necrosis factor)-inhibitor that has proven to be highly effective in suppressing psoriasis disease activity, both in randomized clinical trials and daily practice. However, several studies reported TNF-inhibitors are associated with a dose-dependent increased risk of infections and non-melanoma skin cancer. Real-life clinical practice may require dose tapering as a therapeutic option to reduce the risk of drug-exposure and to increase cost-effectiveness and patient compliance.

We report three patients managed successfully by dose tapering among patients with psoriasis who have been treated with adalimumab. Two patients of them were treated with adalimumab 40mg every other week for at least 22 times (44 weeks) from week 1 after an initial dose of 80mg at week 0. The other, who was just treated six times and then suspended for six months, got the retreatment with adalimumab for 12 weeks. The interval of injections gradually increased from three to six weeks in all of them. They have been maintaining almost clear state checked as the psoriasis area and severity index (PASI) and body surface area (BSA).

We think that dermatologists need guidelines to make informed decisions about an optimal treatment regimen for an individual patient, especially Asian patients with psoriasis. In addition, socioeconomic costs of biological agents will be increased from now on. Therefore, this therapeutic strategy involves relevant advantages in terms of drug-exposure risk, cost savings, and patient compliance.

FC 1-6

Prevalence of Psoriasis in Korea: A Population-Based Epidemiological Study Using The Korean National Health Insurance Database

PARK Jong Seo[1], LEE Jin Yong[2,3], KANG Sungchan[4], JO Seong Jin[1]

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[3]*Institute of Health Policy and Management, Medical Research Center, Seoul National University*
[4]*Department of Health Policy and Management, Seoul National University College of Medicine*

Background: Although psoriasis is universal in its occurrence worldwide, its prevalence varies by geographic location and race. A few hospital-based surveys have reported on the demographic characteristics in Korean patients with psoriasis. However, a nation-wide study on the prevalence of psoriasis in Korea remains uncompleted.

Objective: To determine the prevalence of psoriasis in Korea and to describe the demographic and social characteristics of afflicted individuals.

Methods: We identified patients with psoriasis using a relevant diagnostic code from the sixth revision of the Korean Standard Classification of Disease in the 2011–2015 claims database of the Health Insurance Review and Assessment Service of Korea. We estimated the annual prevalence of psoriasis and described the age and sex distribution of the patients, type and severity of psoriasis, comorbidities, type of health insurance, type of health-care institution and residence area. Patients with moderate-to-severe psoriasis were defined as those who had been treated with phototherapy, classical systemic agents, and/or biologic agents.

Results: The standardized prevalence of psoriasis was 453 per 100,000 individuals of the database population in 2015. We found male preponderance with a 1.3:1 male-to-female ratio, and that the largest number of patients belonged to the age group of 50s. Of the patients diagnosed with psoriasis in 2015, 83.3% had plaque psoriasis and 22.6% had moderate-to-severe psoriasis.

Conclusion: The annual standardized prevalence of psoriasis in Korea was 453 per 100,000 of the population in 2015.

FC 1-7

Clinical Features and Treatment Patterns in Korean Patients with Psoriatic Arthritis: A Restrospective Single Center Study

LEE Minseok, LEE Jaewon, KIM Tae-Gyun, LEE Min-Geol

Department of Dermatology, Severance Hospital, Cutaneous Biology Research Institute, Yonsei University College of Medicine

Psoriatic arthritis (PsA) is a seronegative inflammatory arthritis associated with psoriasis. The prevalence of PsA varies in different countries and there are about 9-14% of prevalence of PsA among psoriatic patients in Korea. However, there are limited data of clinical features and treatment patterns of Korean patients with PsA. Aim of study was evaluate the clinical features of Korean PsA patients and treatment modalities used in the real-world setting. This study was a retrospective, single-center study. 104 Korean patients who were diagnosed with PsA under CASPAR criteria were analyzed. Each patient's medical records, PASI score, BSA, manifestation pattern of PsA, and treatment course were reviewed.Total of 104 patients were enrolled (male:female=1:1.08). The mean age was 50.7 years. The average PASI score was 8.6 and BSA was 11.5%. Spondylitis was the most common subtype of PsA (39.4%). NSAIDs were the most commonly utilized treatment modality (79.8%, n=83), followed by methotrexate (69.2%) and sulfasalazine (37.5%). The order of treatment options maintained at the time of enrollment was NSAIDs (67.3%), methotrexate (48.1%) and sulfasalazine (23.1%). 33 patients were treated with biologics and ustekinumab (n=10) was the most common regimen. Our results suggest that spondylitis was the most common type of arthritis in our cohorts consistent with the previous reports in Korea. NSAIDs, methotrexate and sulfasalazine were commonly utilized in the treatment of PsA patients in Korea.

FC 1-8

Manifestations of Psoriatic Skin Lesions Affecting Lower Limbs of Patients Suffering from Poliomyelitis

KWON Seung Hwi, SONG Jin Young, HAN Geo, JEONG Kyung Muk, SONG Hae Jun

Department of Dematology, Korea University Guro Hospital

Most studies on the pathogenesis of psoriasis in the past decade have focused on immune cells, keratinocytes, or vascular cells. And there has been less emphasis on the role of nervous system. But plenty of evidences supporting that the neural components of skin modulating cutaneous immune reaction has been accumulated. Psoriatic plaques are more densely innervated by sensory nerve fibers than non-lesional skin and denervation is resulted in improvement or disappearance of lesion. The temporal relationship between injury to the nervous system and clearance of skin lesion support the existence of a communication between nerve cells and keratinocyte or immune cells. Patients with poliomyelitis suffered damage of motor neuron and are also known to show lateralization of immune response, usually sparing the psoriatic lesion in the affected limb.

We have experienced two poliomyelitis patients with psoriasis. Case one was 51-year-old male suffering from poliomyelitis on his left leg from 3 year old of age. The second patient was 50-year-old male, who also suffered from poliomyelitis since 9 months of age on both lower limbs.

Although motor functions were totally lost, sensory nerve functions were intact in both cases. Interestingly, contradictory to many literatures reporting sparing effect in affected limb, both of our cases did not show such phenomenon. Poliomyelitis affected limb(s) not only showed same degree of psoriatic lesions but also Koebner phenomenon was noted. We herein report the manifestations of psoriatic lesions of both patients with review of the literatures.

FC 1-9

A Case of Treatment-Resistant Psoriasis Vulgaris Dramatically Resolved by the aid of Psychological Support and Life Style Change

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Undisclosed psychological burden, adversely affecting life style, failure to keep adherence may underlie treatment-resistant psoriasis. Without resolving such underlying problems, course of the disease treatment could frustrate both of patient and dermatologist. We have experienced very unique case of a severe psoriasis patient showing resistance to standard therapy. After relieving her excessive emotional stress and changing unfavorable life style, response to therapy dramatically improved to unexpected degree.

A 26-year-old female with psoriasis was transferred from a private clinic. Her lesion was developed 2 month ago after she went to swimming and suddenly aggravated after excessive scrubbing off dirt of her body skin at public bathhouse. Despite 2 months of phototherapy at private clinic, it was not improved and not tolerable any more due to irritation. Systemic methotrexate therapy for 6 weeks did not showed any significant response. Treatment plan was made to try biologic therapy after she finished 12 weeks of MTX therapy in total. Thereabout, all of sudden, the patient committed suicidal attempt that ended in failure. Although psychiatric examination disclosed moderate degree of depressive state, she refused the treatment from a psychiatrist. After spending time for careful interview to disclose her emotional problem, we found the feeling of hopelessness even for biologic therapy triggered her suicidal attempt and she have neglected to take the medication as prescribed. Also her life style was found to be extremely unfavorable. We arranged the weekly meetings with other patients under biologic therapy to correct her wrong prejudice on biologics therapy. Meanwhile active life style change was recommended and she adhered to it on the basis of strong rapport. After one month of continued MTX therapy, she began to show remarkable improvement for the first time, and finally whole body lesions were disappeared with additional one more month of therapy thereafter. She is staying in lesion-free state until now for 6 months with minimal dose of MTX.

Special Lecture I

CURRICULUM VITAE

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PROFESSIONAL CAREER:

1973	M.D. degree; University of Vienna (under the auspices of the president of the republic), Vienna, Austria
1973-1976	Internship and Residency at the Department of Dermatology I, University of Vienna Medical School, Austria
1977-1978	Visiting fellowship at the Dermatology Branch, NCI, NIH, Bethesda, MD, U.S.A. (mentor: Dr. Stephen I. Katz)
1978-1981	Staff member at the Department of Dermatology, University of Innsbruck Medical School, Innsbruck, Austria
1980	Promotion to the position of an Associate Professor of Dermatology, University of Innsbruck Medical School
1981-1985	Staff Member at the Department of Dermatology I, University of Vienna Medical School Director of the Immunology program at this department.
1985	Professor of Dermatology, Chief, Div. of Cutaneous Immunobiology, Department of Dermatology I, Univ. of Vienna Medical School, Vienna, Austria.
1985-1986	Guest Researcher, Laboratory of Immunology, NIAID, NIA, Bethesda, MD, U.S.A. (mentor: Dr. Ethan M. Shevach)
1985-1991	Director of the Retrovirology program at the Department of Dermatology I, University of Vienna Medical School, Vienna, Austria.
1989-	Director of the program on „Cutaneous Immunobiology“ at the Vienna International Research Cooperation Center (VIRCC), Vienna, Austria
1992	Professor and Chairman, Division of Immunology, Allergy & Infectious Diseases, Department of Dermatology, University of Vienna Medical School, Vienna, Austria.
1993	GCP (Good Clinical Practice) Certificate
1998	Specialist (Facharzt) in Immunology, diploma awarded by the Austrian chamber of physicians.

2016- Professor and Chairman, Department of Dermatology, Medical University of Vienna, Austria

PUBLICATIONS AND SCIENTIFIC MERITS:

290 Original papers, 80 reviews, 106 book chapters, 60 comments, 5 books, 463 invited lectures - in the fields of clinical and microscopic dermatology and venerology, immunodermatology, dermatological microbiology, allergology, photobiology, cellular and molecular immunology, cell biology, dermatooncology, molecular biology, electron microscopy and pharmacology.

SL-1

The Immunopathogenesis of Psoriasis: Adaptive As Well As Innate Circuits As Therapeutic Targets

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Although the cellular origin of disease initiation in psoriasis has yet to be clarified, the critical role of leukocytes in disease development and expression is well established. As opposed to the original concept of T helper (Th) 1 cells being the critical players in disease pathogenesis, we now know that Interleukin 17(IL-17)- producing cells are predominating in psoriatic skin lesions as well in affected joints of patients suffering from psoriatic arthritis. Such IL-17-producing cells consist of T lymphocytes, i.e. Th-17 cells as well as so-called γ/δ T cells, and a subset of innate lymphoid cells (ILC), termed ILC3. The important role of IL-17 in disease pathogenesis is evidenced by the fact that (biologic) drugs targeting IL-17 (e.g., secukinumab, ixekizumab), the IL-17 receptor (e.g. brodalumab) as well as IL-23 (e.g., guselkumab, tildrakizumab, risankizumab), a molecule needed for expansion and survival of IL-17-producing cells, are most effective in the treatment of psoriasis and psoriatic arthritis.

This should not detract from the fact that termination of treatment usually results in disease recurrence. One of the reasons responsible for this are so-called tissue-resident memory T cells (Trm). These cells persist indefinitely in epithelial barrier tissues such as the epidemis and are not eliminated by anti-psoriatic compounds. We now begin to identify the factors responsible for Trm longevity. These may well serve as potential therapeutic targets in psoriasis and perhaps other inflammatory disorders.

Free Communication Ⅱ

FC 2-1

Ustekinumab Therapy in Moderate to Severe Plaque Psoriasis: Efficacy and Safety from 52-Week Results in National Medical Center

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Background: There has been rapid development of novel therapies over the past two decades, especially biologic agents for the treatment of moderate-to-severe plaque psoriasis. Ustekinumab is a human monoclonal antibody that binds to the shared p40 protein subunit of human interleukins 12 and 23 with high affinity and specificity. In the phase III studies of ustekinumab, Psoriasis Area Severity Index (PASI) 75 at week 28 was 71%. Both short-term and long-term reports from Phase II and III trials regarding the safety profile of ustekinumab are favorable without observable dose-dependent adverse events (AEs).

Objective: We sought to evaluate clinical efficacy and safety of ustekinumab for 52 weeks in patients with moderate-to-severe plaque psoriasis.

Methods: A retrospective study was performed on 23 moderate-to-severe plaque psoriasis patients who treated by ustekinumab over 52 weeks in National Medical Center from September 2012 to August 2017. All patients received subcutaneous injections of ustekinumab 45mg at week 0 and 4 and every 12 weeks thereafter. Data including PASI, body surface area (BSA) and any adverse event were recorded at week 28 and 52.

Results: 82.6 %(19 of 23) patients, receiving ustekinumab 45mg, achieved PASI 75 and 30 %(7 of 23) achieved PASI 90 at week 28. In the remaining 4 patients who didn't achieve PASI 75, one patient discontinued ustekinumab because of developing palmoplantar pustulosis and the other patients discontinued ustekinumab because of no efficacy. At week 52, 78.2%(18 of 23) patients achieved PASI 75 and 47.8%(11 of 23) achieved PASI 90.

Conclusion: 78.2%(18 of 23) and 47.8%(11 of 23) patients achieved PASI 75 and PASI 90 at week 52, respectively. One patient discontinued ustekinumab due to no efficacy and developing palmoplantar pustulosis and 3 patients discontinued ustekinumab because of no efficacy. Further studies are needed to include more patients and determine long term efficacy and safety of ustekinumab treatment in the psoriasis patient.

FC 2-2

Treatment Outcomes and Response Pattern of Ustekinumab in Korean Patients with Psoriasis: A Retrospective Single Center Study

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Psoriasis is a chronic immune-mediated inflammatory skin disease affecting 2-3% of worldwide population. Ustekinumab, an IL-12/23p40 inhibitor, is a biologic reported to be effective and safe in treating psoriasis. However, there are limited data showing treatment outcomes of ustekinumab in patients with psoriasis in Korea. The objective of study was to evaluate the treatment outcomes and response pattern of ustekinumab in patients with psoriasis in Korea. This study was a retrospective single-center study. 84 patients with psoriasis treated with ustekinumab were analyzed. Each patient's medical records, PASI score, BSA were reviewed at baseline and up to week 52. In total, 84 patients were included (male:female=1.8:1). The mean age was 44.5 years. At week 16, 86.7% achieved PASI75, 59.0% achieved PASI90 and 20.5% achieved PASI100. By week 16, 84.8% of subjects had attained PASI75 for the head region, whereas 79.0% had attained it for lower extremities, indicating relatively slower treatment response of psoriatic lesions on lower extremities. 4 patients discontinued treatment due to lack of effect. There was no severe adverse event during follow-up period. Ustekinumab demonstrated highly effective and safe treatment profiles in Korean psoriatic patients consistent with the previous reports mainly from Western countries. Ustekinumab reduced skin lesions most effectively on the head region at time of week 16.

FC 2-3

Clinical Factors Predicting the Therapeutic Response to Ustekinumab in Patients with Moderate to Severe Chronic Plaque Psoriasis

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While ustekinumab has been widely used as an effective biologic for the treatment of chronic plaque psoriasis, no prospective studies have specifically investigated the clinical factors that may influence treatment outcomes with ustekinumab. In this post-hoc analysis, we sought to identify specific clinical factors that may influence treatment outcomes with ustekinumab in psoriasis patients. In the MARCOPOLO study, 102 Korean patients with moderate to severe psoriasis were analyzed to assess the influence of baseline characteristics as clinical factors on clinical response (improvement in Psoriasis Area and Severity Index by ≥75%/90% [PASI75/PASI90]) to ustekinumab. In addition, differences in PASI75 and PASI90 responses between the responder group and non-responders were evaluated at weeks 28 and 52. Multiple logistic regression analysis was used to determine adjusted clinical factors predicting treatment outcomes among patient characteristics. At week 28, there was a significant difference in PASI75/PASI90 response based on prior biologic experience, although the difference did not persist at week 52. In addition, after adjusting for the effects of relevant clinical factors, biologic experience was significantly associated with less PASI75 (odds ratio [OR] = 0.14, P = 0.001) and PASI90 (OR = 0.22, P = 0.036) responses at week 28. The presence of comorbidities was higher among non-responders than among PASI75/PASI90 responders at both weeks 28 and 52, but was not statistically significant. Previous biologic use was the only clinical factor predicting less response at week 28, although it did not influence the clinical response after week 52. Further studies are warranted to investigate the association between presence of comorbidities and clinical response.

FC 2-4

Comparative Study of Skin Autofluorescence Expression in Psoriasis and Atopic Dermatitis

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Background: Treatment of psoriasis and atopic dermatitis (AD) requires their differentiation from other eczematoid dermatitis and a determination of disease severity. However, both can be clinically difficult and the findings subjectively interpreted

Objective: We investigated the utility of in vivo autofluorescence (AF) measurements for diagnosis of both diseases, and determination of severity.

Materials & Methods: Thirty patients with psoriasis and thirty patients with AD were recruited, together with sex- and age-matched patients with healthy skin. AF intensity was measured using the EcoSkin® fluorescence video dermatoscope. In psoriasis and AD patients, AF in non-sun-exposed lesional and non-lesional skin was measured.

Results: Psoriasis was associated with higher AF and AD with lower AF intensity peaking around 620 nm. In addition, skin AF intensity was associated with degree of erythema in psoariasis patients ($p=0.003$).

Conclusions: Non-invasive measurement of skin AF in vivo can aid in diagnosis of psoriasis and AD as well as in treatment monitoring.

FC 2-5

The Histopathological Differentiation Between Palmar Psoriasis and Hand Eczema: A Retrospective Review of 96 Cases

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Background: Hiistopathological difference among palmar psoriasis (PP), hand eczema (HE), and hyperkeratotic hand dermatitis (HHD) has been poorly described.

Objectives: We sought to distinguish among PP, HE, and HHD on a histopathological basis.

Methods: We retrospectively analyzed the histology of hematoxylin-eosin stained sections obtained from 96 patients diagnosed with PP, HE, or HHD.

Results: The patients were divided into 4 subgroups; PP (n =16, group A), HE without Atopic dermatitis (AD) or nummular dermatitis (ND) (n = 41, group B), HE with AD or ND (n = 14, group C), and HHD (n = 25, group D). Loss of the granular layer (group A, 62.5% versus group B, 24.4% or group C, 0.0%) was more consistent with a diagnosis of PP rather than of HE (p=0.047, 0.002, respectively). Psoriasiform epidermal hyperplasia (group B, 36.6% or group C, 35.7% versus group D, 72.0%) favoured HHD over HE (p=0.01, 0.043, respectively).

Limitations: Limitations of this study include retrospective nature and small sample size.

Conclusion: Our study demonstrated that a significant difference exists in the thickness of the granular layer between PP and HE, and this may be helpful in differentiating between these two conditions. There was no difference between PP and HHD.

FC 2-6

Increased Risk of Atherosclerotic Cardiovascular Disease Among the Patients with Psoriasis in Korea: A 17-Year Nationwide Prospective Cohort Study

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Psoriasis is a chronic inflammatory skin disorder which has been reported to be associated with cardiometabolic comorbidities in Caucasians. However, the association between psoriasis and risk of atherosclerotic cardiovascular disease (ASCVD) among Asians is largely unclear yet. Total 1,733,620 Koreans who received health insurance from the National Health Insurance System and had a medical evaluation every two years between 1997-2000 were prospectively followed. The point prevalence of psoriasis was 0.42% and 0.35% among Korean men and women, respectively and there was an age-dependent increase in psoriasis prevalence among men. In Cox proportional hazard analyses, the individuals with psoriasis had a higher hazard ratio (HR) for incidence of ASCVD (HR = 1.18, 95% CI = 1.09-1-27) compared to controls during the observational period. The increased risk for ischemic heart disease was observed among male psoriatic patients (HR = 1.33, 95% CI = 1.18-1.50), while that for thrombotic stroke was in case among female patients (HR = 1.37, 95% CI = 1.08-1.74), indicating that there are gender-dependent atherosclerotic comorbidities affecting Korean patients with psoriasis. In conclusion, psoriasis is associated with the long-term risk of ASCVD in Korean.

FC 2-7

Skin-Specific CD301B+ Dermal Dendritic Cells Drive IL-17-Mediated Psoriasis-Like Immune Response in Mice

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Conventional dendritic cells (cDCs) are composed of heterogeneous subsets commonly arising from DC-committed progenitors. A population of CD301b-expressing DCs has recently been identified in non-lymphoid barrier tissues such as skin. However, whether CD301b+ DCs in the skin represent ontogenetically unique subpopulation of migratory cDCs has not been fully addressed. Here, we demonstrated that CD301b+ dermal DCs were distinct subpopulation of FLT3L-dependent CD11b+ cDC2 lineage which required an additional GM-CSF cue for the adequate development. Although the majority of lymphoid resident cDC2 lacked CD301b expression, dermal migratory cDC2 contained a substantial fraction of CD301b+ subset. Similar to CD301b− population, CD301b+ dermal DC development was closely regulated by FLT3 signaling, suggesting their common origin from FLT3L-responsive cDC progenitors. However, FLT3L-driven cDC progenitor culture was not sufficient but additional GM-CSF treatment was required to produce CD301b+ cDC2. In vivo development of CD301b+ cDC2 was significantly augmented by exogenous GM-CSF, while the repopulation of CD301b+ dermal cDC2 was abrogated by GM-CSF neutralization. Functionally, CD301b+ cDC2 was capable of producing a high level of IL-23, and the depletion of CD301b+ cDC2 effectively prevented IL-17-mediated psoriasiform dermatitis. Therefore, our findings highlight the differentiation program of a distinct CD301b+ dermal cDC2 subset in the skin and its involvement in psoriatic inflammation.

FC 2-8

The Influence of IL17F His161Arg Polymorphism on Serum Inflammatory Cytokines

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Background: Psoriasis is an immune-mediated inflammatory disease that is significantly associated with the T helper type 17 (Th17) cell signal transduction pathway. Interleukin 17 (IL-17), one of the main effector cytokines of Th17 cells, has been reported to play an important role in the pathogenesis of psoriasis. In a previous study, a locus on the *IL17F* gene, *IL17F* rs763780 (His161Arg) T/C variant, was reported to be associated with psoriasis.

Objectives: The aim of this study is to reproduce and demonstrate the correlation between the *IL17F* sequence variation and psoriasis and determine the effect on serum cytokine levels.

Methods: 116 patients with psoriasis who visited Konkuk University Hospital dermatology clinic from February 2016 to May 2017 and 97 healthy volunteers were recruited. Genotyping was performed using a quantitative polymerase chain reaction, and serum cytokine analysis was performed using a multiplex immunoassay.

Results: The *IL17F* His161Arg variant showed significant association with psoriasis in both genotype (odds ratio = 2.2, P = 0.041) and allele (odds ratio = 2.18, P = 0.032) analyses. Patients with psoriasis had significantly higher serum levels of IL-17F (P = 0.014) and IL-12 (P = 0.027) in the presence of the mutant allele which were not in the healthy controls.

Conclusion: The *IL17F* His161Arg polymorphism was significantly associated with psoriasis and increased serum production of it and IL-12, especially in patients with psoriasis. The results suggest that the *IL17F* His161Arg sequence variation increases the susceptibility of psoriasis through both a direct effect of increasing IL-17F production and its indirect effect of increased production of IL-12.

FC 2-9

Imiquimod-Applied Interleukin-10 Deficient Mice Better Reflects Severe and Persistent Psoriasis with Systemic Inflammatory State

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Background: Transgenic mice have been investigated for the imiquimod-induced psoriasis model. However, as compared to human psoriasis, the lack of chronicity in the previous models remains as a major limitation.

Objectives: To evaluate the imiquimod-applied interleukin (IL)-10 knock-out (KO) mice better represent psoriasis than the previous models.

Methods: Imiquimod or vehicle cream was applied to the ear and shaved back of the IL-10 KO mice and wild type (WT) mice, and each mice group was sacrificed on day 3 or day 15. We compared the inflammatory responses, such as clinical and histological features and cytokine profiles, using immunohistochemistry, quantitative reverse transcription-polymerase chain reaction, and enzyme-linked immunosorbent assay.

Results: Imiquimod-induced skin inflammatory responses were observed in both IL-10 KO mice and WT mice on day 3. However, IL-10 KO mice exhibited significantly higher clinical and histopathological severity index than did WT on day 15. In cytokine profiles, IL-10 KO mice showed significantly higher IL-23p19 mRNA expressions and serum levels of IL-17A and tumor necrosis factor-α on day 15. In addition, IL-10 KO mice showed significantly higher spleen weight to body weight than did WT on day 3 and day 15.

Conclusion: These results suggest that imiquimod-applied IL-10 KO mice might be a good model that can reflect chronic and severe psoriatic features.

Special Lecture Ⅱ

CURRICULUM VITAE

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Dr. Yi Zhao is the chairman of dermatology department of Beijing Tsinghua Changgung Hospital, and associate professor of Medical School of Tsinghua University. He has been a research scholar in the department of dermatology of Vienna Medical University, Austria. His major research interests include psoriasis, phototherapy, laser, and photodynamic therapy. He has published over 40 peer reviewed papers, has been in editor board of six dermatological books, and has been extensively experienced in multicenter clinical trials on skin diseases including psoriasis. Three of his research projects was supported by National Natural Science Foundation of China.

Representative publications:

1. Jin T, Sun Z, Chen X, Wang Y, Li R, Ji S, Zhao Y*. Serum Human Beta-Defensin-2 Is a Possible Biomarker for Monitoring Response to JAK Inhibitor in Psoriasis Patients. Dermatology. 2017 Jun 28. doi: 10.1159/000475809
2. Zhao Y. Nicotinamide for Skin-Cancer Chemoprevention. N Engl J Med. 2016 Feb 25;374(8): 789.
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SL-2

The Long Way to a Successful Management of Psoriasis

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Psoriasis is a chronic inflammatory skin disease, affecting both physical and psychological health of the patients. Because psoriasis cannot be cured, long-term management of this disease is important. However, successful long-term management of psoriasis remains a challenge, for both lacking of clinical evidence and complicity of practice in a long period. Topical drugs, ultraviolet treatment, DMARDs and biologics are available weapons for management of psoriasis. While long-term management of psoriasis requires both scientificity and artistry in determine the way of applying the treatments. Efficacy and safety should be balanced in long-term treatment strategies. For this reason, sequential and rotation regimens have been developed for optimization of the efficacy and safety of both topical and systemic treatments. Furthermore, compliance, quality of life, supportive modalities, and health economic policies are all key components of long-term management system for psoriasis. Therefore, technologies based on Internet or mobile system, psychological interventions such as cognitive behavior treatment, patient education, and efforts to arouse more social awareness should all be integrated in the long-term management of psoriasis.

From the Society - Forum on Health Insurance Policy for Severe Psoriasis

중증건선 산정특례제도의 운영

양 효 숙 부장

국민건강보험공단 산정특례확대추진팀

중증건선 산정특례제도 관련 Q & A

박 혜 진

인제대학교 의과대학 일산백병원 피부과

건선은 경증부터 중등증, 중증의 다양한 중증도를 가지는 질환으로 국소도포제 만으로도 조절 가능한 경증의 환자들도 있으나 중증건선의 경우 평생 호전과 악화를 반복하며 심혈관계질환, 대사증후군, 건선관절염 등 다양한 질환들이 동반되고 사회생활에 좋지 않은 영향을 주게 된다.

최근 다양한 생물학적 제제들의 개발은 중증건선 환자들에게 희망을 주고 있으나 경제적 부담으로 인해 쉽게 접근하지 못하고 포기하는 환자들이 많았던 것도 사실이다.

2017년 6월 1일부터 시작된 중증건선 산정특례제도는 이러한 중증건선 환자들에게 도움을 주기 위하여 새로이 시행되는 정책으로 의사와 환자들에게 기대감이 높으나 건선은 염증성 피부질환으로 다른 질환과 달리 호전과 악화가 반복되어 중증도 결정에 주의가 요구된다.

이에 초기 제도 적용에 혼란을 피하기 위하여 현재까지 시행 3개월 간 있었던 질문들을 중심으로 중증건선 산정특례제도에 대하여 알아보고자 한다.

건선교육/상담/중증건선관리 의료수가의 필요성

김 동 현

차의과학대학 피부과

건선은 만성 재발성 피부질환으로 심혈관계질환, 대사증후군, 건선관절염 등이 동반될 수 있으며, 대인기피 및 우울증 등 경우 삶의 질에 심각한 영향을 주는 경우도 많다. 건선 환자들에게 잘못 알려진 생활습관 및 민간 요법이 오히려 건선을 악화시키는 경우도 있다. 특히 처방 약물을 지시에 따라 지속적으로 복용하는 높은 순응도는 치료에 매우 중요하며, 낮은 치료 순응도는 부정적인 치료 결과를 초래하고 그에 따라 치료를 중도 중단하게 되며, 이는 증상 악화를 초래하는 악순환의 고리를 형성하게 된다. 따라서 건선과 같은 만성 질환에서 생활습관 교정 및 순응도를 유지하기 위한 교육과 상담 프로그램이 절실히 요구되고 있다.

당뇨와 암같은 만성질환을 중심으로 환자 교육을 통하여 질병의 경과를 호전을 시킬 수 있으므로, 현재 교육 상담이 보험급여 항목으로 인정되어 진료 현장에서 사용되고 있다. 대한건선학회에서 2013년부터 ‘건선학교’ 프로그램을 전국 주요 거점병원을 중심으로 시작하여 올해는 전국 19개 병원에서 표준 교안에 의한 병원단위의 ‘건선교실’을 개최하여 건선 환자의 생활습관 교정 및 치료에 대한 이해를 높이기 위한 노력을 하고 있다. 건선환자의 표준화된 교육 및 상담을 통해 환자의 치료의 순응도가 향상되고 결과적으로 치료 효과를 높일 수 있다는 것이 알려져 있다.

최근 생물학적제제가 중증 건선 환자의 치료에 본격적으로 사용되면서 중증 건선 치료에 많은 변화를 주고 있다. 생물학적제제의 급여와 산정특례 등록을 위한 건선의 중증도 평가 및 호전정도를 판단하는 지표로서 PASI (Psoriasis Area and Severity Index)와 BSA (Body Surface Area)가 사용되고 있다. 이를 실제 진료 현장에서 정확히 시행하기 위한 보수교육이 지속적으로 진행되고 있으며, 이에 대한 적절한 의료수가의 신설이 필요하다.

대한건선학회의 건선학교/건선교실 운영 성과

이 주 희

연세대학교 의과대학 피부과

1. 건선교실 소개

2013년에 처음 실시하여 올해로 5회째를 맞이하는 건선교실은 건선 환자를 위해 대한건선학회에서 제공하는 환자 교육프로그램입니다.

만성 염증성 질환인 건선을 성공적으로 치료하려면 의학적 치료뿐 만 아니라 건선 질환에 대한 적절한 환자 교육이 필수적이기에, 많은 환우에게 건선에 대한 올바른 질환 정보와 최선의 치료방법들을 알리기 위해 전국 주요 거점병원을 중심으로 ‘ 병원단위’ 건선교실을 열고 있습니다.

2. 건선교실 운영 목적

- 대한건선학회는 건선교실 프로그램을 개발하면서, 표준화된 건선환자교육 프로그램과 교재를 제작하고, 그 유용성을 검증하고자 합니다.
- 올바른 치료와 관리를 위해, 환자를 교육하고 관리하는 건선교실 프로그램을 만듭니다.
- 건선교실 프로그램 운영을 위해 표준화된 교안을 제작하여 건선교실 운영지침인 ‘건선교실 표준교안’을 제작합니다.
- 건선교실 프로그램에 참여한 환자가 건선을 올바로 이해하고 개개인의 특성에 맞게 치료, 관리하여 재발을 예방하는데 효과가 있는 지 검증합니다.
- 건선학교 프로그램을 통하여, 환자와 의료진 사이에 소통의 기회를 늘려 치료 효과를 높이며, 신뢰를 바탕으로 유대관계가 형성될 수 있도록 도울 수 있습니다.

3. 현재까지의 실적

3-1. 2017년도 건선교실 참가 현황

- 참석자 현황(19개 병원 전체, 강원대학교병원 미포함)
  사전 등록자 : 401명 / 실제 참석자 : 577명(전년도 대비 참석자 수 64% 증가)
- 전국 총 20개 병원 건선교실 개최

가천대학교길병원	서울대학교병원
가톨릭대학교 의정부성모병원	순천향대학교 천안병원
강남세브란스병원	아주대학교병원
강원대학교병원(진행 예정)	인제대학교 상계백병원
경북대학교병원	인제대학교 해운대백병원
경희의료원	전남대학교병원
계명대학교 동산의료원	조선대학교병원
고대구로병원	중앙대학교병원
국립중앙의료원	한림대학교 강남성심병원
분당차병원	한림대학교 동탄성심병원

3-2. 지난 건선학교 참가 현황

연도	참석자(명)	개최 병원
2016년	351	가천대학교길병원 고려대학교 구로병원 부산대학교병원 서울대학교병원 충남대학교병원
2015년	206	고려대학교 구로병원 경북대학교병원 부산대학교병원 부천성모병원 충남대학교병원

4. 운영 방식 및 성과

- 대한건선학회에서는 건선 환자의 교육프로그램인 <건선교실> 운영에 관심이 있는 병원을 지원하였습니다.
- 2017년을 맞이하여, 본 학회는 [건선학교]의 발전된 형태이자 각 병원에서 소규모로 운영할 수 있는 환자교육프로그램인 <건선교실>을 준비하였습니다.
- <건선교실>은 한 병원의 피부과 선생님께서 해당 병원의 건선 환자 위주로 운영할 수 있도록 구성된 교육프로그램입니다.
- 대한건선학회에서 제작한 표준화된 교육자료를 이용하여 교육할 수 있습니다.
- 환자 및 병원의 여건에 따라 2017년 6월부터 8월까지 중 택일할 수 있습니다.
- 환자의 특성 및 병원의 여건에 따라 교육시간과 내용을 조절할 수 있습니다.
- 본 학회는 <건선교실>의 운영을 신청한 병원에 대해 선정과정을 거쳐 교육자료(교안 및 교재) 및 운영을 위한 소정의 지원을 제공
- 병원 & 운영 사무국 업무 내용

병원	운영 사무국
1. 건선교실 장소 및 일시 예약 2. 강의 아젠다 구성 3. 건선교실 홍보 4. 현장 운영	1. 콜센터 운영을 통한 환자 모집 2. 표준교안 및 편집가이드 배포 3. 포스터 제작 및 발송 4. 현장 제작물 및 다과 배포

Isagoge for Young Dermatologists Studying Psoriasis

Isagoge for Young Dermatologists Studying Psoriasis (1)

SHIN Bong-Seok

Department of Dermatology, School of Medicine, Chosun University

1. A case of suicide in a severe psoriasis patient exacerbated after phototherapy

A 79-year-old man who has been diagnosed with psoriasis for 5 years and has died suicide during treatment. He came to our hospital because of exacerbation of the skin lesions after phototherapy. He presented with pruritic multiple various sized scaly plaques and crusts on whole body. He was performed skin biopsy and treated with cyclosporin, systemic steroid, antihistamine and topical steroid, but he did not show significant improvement in treatment. 3 months later, the patient took his own life. He had no any psychiatric disease and other chronic comorbidities, but he had never received any special counseling because he had not complained or appealed to psychiatric problems when he was being treated at the outpatient clinic. Psychiatric and suicidal risk assessments are highly recommended for patients with dermatologic disease, especially for patients with severe psoriasis, which may cause depressive symptoms. Caring for patients with psoriasis and their mental health needs may require a concerted effort among dermatologists.

2. Is this a recurrent erythema annular centrifugum or annular pustular psoriasis in a plaque psoriasis patient?

A 63-year-old man presented with asymptomatic multiple various sized scaly plaques on whole body. He diagnosed with psoriasis vulgaris 30 years previously and also had diabetes and hypertension. He had intermittent annular erosiove lesions while plaque lesions were repeatedly improved and aggravated. He has been treated with oral cyclosporin, sulfasalazine, antihistamine and topical steroid for 1 year. But there was not significant improvement in skin lesions. So, we decided to treat with ustekinumab monotherapy. Because of the decreased effectiveness of lesions after the ustekinumab injection six times, we switched to secukinumab monotherapy. The psoriatic plaque lesions were improved, but the annular eruption was repeated without any improvement during the injection of ustekinumab or secukinumab. Biopsy was taken from the annular lesion.

Isagoge for Young Dermatologists Studying Psoriasis (2)

Diagnosing and Treating Childhood Plaque Psoriasis: Challenges and Solutions

KIM Gun-Wook, KIM Byung-Soo

Department of Dermatology, School of Medicine, Pusan National University

The total prevalence of psoriasis in children aged < 18 years is approximately 0.5-2%, and the rate increases linearly with age from 0 to 18 years. Within the childhood age group, quality of life may be significantly compromised, with social development being especially impaired. Their body metabolism and the pharmacokinetics of drugs make safe and effective treatment of psoriasis a challenge.

The clinical features of psoriasis in childhood resembles adult disease, however, some clinical features are noteworthy: neonatal diaper rash is relatively specific, face involvement and guttate psoriasis are more common, plaques are often smaller, and scales are finer and softer than in adults. The link between psoriasis and metabolic comorbidities has been highlighted, notably in relation to excessive weight and obesity. Topical vitamin D analogues or corticosteroids are established first-line treatments for childhood psoriasis, although safety concerns may accompany their use. Vitamin D analogues can cause skin irritation and hypercalcemia, while corticosteroids are associated with local adverse events, including skin atrophy, striae and telangiectasia, as well as systemic effects such as adrenal suppression. Combination of these topical agents capitalizes on their beneficial clinical characteristics and can allay side-effects. A combination of calcipotriol plus betamethasone dipropionate has demonstrated superior efficacy to monotherapy with its individual components. For chronic cases and more severe cases, phototherapy or traditional biologic systemic treatments must be discussed.

We present two cases of childhood psoriasis treated with calcipotriol/betamethasone dipropionate and discuss peculiar features and treatments of childhood psoriasis.

Isagoge for Young Dermatologists Studying Psoriasis (3)

PARK Kyung-Duck

Chungnam National University Hospital

There have been many advances in the treatment of psoriasis, but there is no complete treatment yet. During this time, I would like to present difficult cases of psoriasis treatment. I have prepared two cases. One is a case of severe chronic plaque psoriasis which does not respond to biologic treatment and the other is a case of treating pustular psoriasis.

A 46-year-old man visited the hospital with generalized multiple palm sized silvery plaques on whole body for nearly 20 years. He suffered from psoriasis since 1999. He lived in Pohang city and wanted to treat his disease with Stelara®. In 2011, he received 4 times Stelara® injection therapy. He restarted Stelara® injection therapy but symptoms including PASI scores did not improve. So, he changed his treatment method with another biologic agent (Humira®), but his symptoms only improved during about one year and then worsened again. He tried other biologic agents but had not seen any therapeutic effect.

The second case was a 34-year-old female patient who presented with spreading erythematous patches with marginal numerous pinhead sized pustules on extremities. She was diagnosed pustular psoriasis at 5 years old. She had been treated for a long time because of pustular psoriasis and was also admitted several times. She had been treated using MTX, Cyclosporine, and Mycophenolate mofetil. Until recently, symptoms controlled with MTX, but skin lesions began to worsen three months ago. When she came to the hospital, she had a mild fever. She was hospitalized and treated with steroids and cyclosporine, but pustules appeared to spread to other sites. Medication was changed but symptoms were not controlled. The suspicion of drug fever condition was observed when treating with dapsone and colchicine. Finally, the symptoms were controlled by cyclosporine and acitretin, and she was discharged from hospital and was constantly treated outpatiently.

Through this opportunity, I hope that it will be time to discuss the case and make the best solution together.

대한건선학회 임원 및 평의원

<2017년 9월 현재>

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The 21st Annual Meeting of The Korean Society for Psoriasis

인 쇄 2017년 9월 20일
발 행 2017년 9월 23일

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