Symposium 6: Psoriasis

◎ Topic: Unmet needs on studies for psoriasis

◎ Background for the topic: The scientific community including the Korean Society for Psoriasis is continuing to explore the complex pathogenesis of psoriasis, facilitating the development of a new armamentarium of more effective, targeted therapies. Despite these advancement, however, substantial deficits still remain in our understanding of psoriasis and its treatment, necessitating further research in many areas. Here, we hope to discuss the most important but remaining gaps in research that currently exist and make suggestions for studies that should be performed to address these deficits.

◎ Program director: Byung Soo Kim (Academic Director)

◎ Format: Lecture (O), Panel Discussion ( ), Workshop ( ), the others ( )

Symposium 6-2 (SYP 6-2)

Research gaps on psoriatic clinical features

Hai-Jin Park, M.D., Ph.D.

Department of Dermatology, Inje University

1. Clinical Features
   ① Natural history of psoriasis
   ② Clinical and genetic factors that influence clinical phenotype and severity of skin disease
   ③ Factors associated with spontaneous regression
   ④ The prevalence and nature of genital psoriasis in males and females

2. Comorbidities
   ① Cardiovascular comorbidities : not all studies have shown a positive association between metabolic syndrome and cardiovascular disease and psoriasis, especially for young patients with moderate to severe disease
   ② Trends in incidence over time and the prevalence of psoriasis-associated comorbidities according to age and geographic region
   ③ The modulatory effects of systemic and biologic therapies on cardiometabolic risk
   ④ The impact of weight reduction on the clinical course of psoriasis and treatment response

3. Subpopulation
   ① Pediatric psoriasis
      - Epidemiology
      - the role of family history, birthweight and environmental influences on the course of psoriasis
      - Psychological effects
      - The use of both traditional systemic and biologic agents
   ② Pregnancy
      - The effect of psoriasis on pregnancy outcomes
      - Safety of topical.systemic, and biologic agents for psoriasis in pregnancy
      - The safety of breast-feeding in women treated with systemic or biologic agents
   ③ Elderly
      - Optimal treatment regimens and monitoring guidelines for elderly

4. Psoriatic arthritis
   ① Incidence, natural history, and degree of joint destruction
   ② Whether early treatment with appropriate systemic therapies could prevent or delay the onset of psoriatic arthritis

■ CURRICULUM VITAE ■

박혜진(Hai-Jin Park, M.D., Ph.D.)

Associate Professor, Department of Dermatology, Inje University

Education:

1988-1994	Ewha Womans University College of Medicine (MD), Seoul, Korea
1996-1998	Ewha Womans University College of Medicine (MS), Seoul, Korea
2006-2010	Ewha Womans University College of Medicine (PhD), Seoul, Korea

Training and Fellowship Appointments:

1996-1999	Dermatology residency, Ewha Womans University Hospital, Seoul, Korea
2013.9-2014.8	International Dermatopathology fellowship, Hospital of the University of the Pennsylvania, PA, USA

Faculty Appointment:

2006-2010	Assistant professor, Dermatology, Inje University Ilsanpaik Hospital, College of Medicine
2011-present	Associate professor, Dermatology, Inje University Ilsanpaik Hospital, College of Medicine
2006-2011, 2014.9-present	Chairperson, Dermatology, Inje University Ilsanpaik Hospital

Memberships:

Korean Dermatological Association
Korean Society for Psoriasis
Korean Society of Dermatopathology
American Academy of Dermatology
International Society of Dermatopathology

Symposium 6-3 (SYP 6-3)

Psoriasis: Research gaps on pathogenesis

Taegyun Kim, M.D., Ph.D.

Department of Environmental Medical Biology, Institute of Tropical Medicine,
Yonsei University College of Medicine, Seoul, Korea

Psoriasis is a common and chronic inflammatory skin disease characterized by discrete erythematous scaly plaques. Psoriatic lesions are typically infiltrated with a large number of inflammatory cells which are mainly composed of dendritic cells and cytokine-producing T cells. Psoriasis can be managed by using immune-modulating strategies, indicating that psoriasis is one of immune-mediated dermatoses. A growing body of evidence from both basic and clinical studies has elucidated that IL-23-derived IL-17 immune response plays a central role in the pathogenesis of psoriasis. However, there are still unsolved key questions about psoriatic pathogenesis which remain to be answered to more deeply understand the underlying nature of psoriasis. Here we will discuss three interesting parts of questions about the pathogenesis of psoriasis based on state of the art research trend.

1. Phenotypic translation of psoriasis genetics:
   Skin-specific genes, Innate immunity genes, Adaptive immunity genes
2. Autoimmune nature of psoriasis
   Melanocyte antigen ADAMTSL5, Neolipid antigens presented by CD1a+ Langerhans cells
3. The relevance of imiquimod-induced animal model of psoriasis.
   Mouse strain-dependent effects, Limitations and possible confounding variables to consider

Deciphering research gaps on psoriatic pathogenesis will shed light on a fruitful chance of developing new therapeutic modalities of psoriasis.

■ CURRICULUM VITAE ■

김태균(Taegyun Kim, M.D., Ph.D.)

Research Scholar, Department of Environmental Medical Biology, Yonsei University College of Medicine, Seoul Korea

Education:

2001-2006	Yonsei University College of Medicine (MD), Seoul, Korea
2009-2010	Department of Dermatology, Yonsei University College of Medicine (MS), Seoul, Korea
2012-2016	Department of Environmental Medical Biology, Yonsei University College of Medicine (PhD), Seoul, Korea

Training and Fellowship Appointments:

2007	Internship, Severance Hospital, Yonsei University College of Medicine , Seoul, Korea
2008-2011	Dermatology Residency, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea
2011.3-2011.4	Visiting physician, Krueger Lab, Laboratory for Investigative Dermatology, The Rockefeller University, New York, NY, USA
2015.8-2016.7	Research Fellow, Department of Dermatology, Brigham and Women's Hospital, Harvard Medical School, Boston, USA

Memberships:

2012-present	Korean Dermatological Association

Symposium 6-4 (SYP 6-4)

Research gaps in recent treatments including biologics

Seong-Jin Jo, M.D., Ph.D.

Department of Dermatology, Seoul National University Hospital

Over the past decade, the investigation on the cellular and molecular pathogenesis of psoriasis facilitated the development of effective therapy including many biologic agents. There are so many clinical studies that reported the efficacy and safety of the old and new therapies for psoriasis, but there are still gaps in research in the laboratory and care in the real world. For example, there is a lack of high level evidence about the rebound flare after abrupt discontinuation of potent topical corticosteroids as well as the comparative effectiveness of topical agents for specific location such as scalp, nail, and intertriginous areas. The carcinogenic risk of narrow-band UVB should be proven in long-term prospective studies. Evidences from large, long-term, well-designed, comparative studies with a placebo arm are necessary for further evaluation on the effectiveness and safety of systemic agents including all new biologic agents. Combination treatment with biologic and conventional systemic agents also needs evidences from well-designed studies. In addition, potential biomarkers need to be developed to predict the efficacy of treatments and select an appropriate treatment for each individual. The treatment of psoriasis would be more promising by overcoming the current research gaps.

■ CURRICULUM VITAE ■

조성진(Seong Jin Jo, M.D., Ph.D.)

Clinical associate professor, Department of dermatology, Seoul National University Hospital, Seoul, Korea

Education:

1997.3-2001.2 Seoul National University College of Medicine, Seoul, Korea M.D. (Medical Doctor)
2003.3-2005.2 Postgraduate school of Seoul National University (MS), Seoul, Korea
2009.2-2012.2 Postgraduate school of Seoul National University (PhD), Seoul, Korea

Training and Fellowship Appointments:

2002.3-2006.2 Dermatology residency, Seoul National University Hospital, Seoul, Korea
2009.5-2012.2 Dermatology fellow, Seoul National University Hospital, Seoul, Korea

Faculty Appointment:

2013.3-2017.2 Clinical Assistant Professor, Department of Dermatology, Seoul National University Hospital, Seoul, Korea Hospital
2017.3-present Clinical Associate Professor, Department of Dermatology, Seoul National University Hospital, Seoul, Korea Hospital

Memberships:

2006-present Korean Dermatological Association
2009-present Korean Society for Investigative Dermatology
2009-present The Korean Society for psoriasis
2009-present The Korean Hair Research Society
2011-present The Korean Society for Skin cancer
2014-present The Korean Society for Aesthetic and Dermatologic Surgery