

Medicine and Rheumatology

1. Staffs and Students (April, 2009)

Professor	Nobuyuki MIYASAKA Masayoshi HARIGAI
Associate Professor	Hitoshi KOHSAKA, Ryuji KOIKE,
Junior Associate Professor	Kazuki TAKADA,
Assistant Professor	Shinya HIRATA, Michi TANAKA,
Research Nurse	Shoko KAWASE
Graduate Student	Akito TAKAMURA, Kayoko KANEKO, Naoko OKIYAMA, Yoshishige MIYABE, Akiko SUZUKI
Research Student	Yousuke MURAKAMI,
Resident	Naoki KIMURA, Tadashi HOSOYA, Tomoko TAKIZAWA, Yoko NAKAZATO, Yusuke MATSUO,
	Tetsuo KUBOTA, Toshihiro NANKI Hideyuki IWAI Fumitaka MIZOGUCHI, Yoshinori NONOMURA Kaori WATANABE, Masayasu TOYOMOTO, Ryoko SAKAI, Chie MIYABE, Hisanori HASEGAWA, Hayato YAMAZAKI, Kenshi TAKENAKA, Shin FUKUDA, Waka YOKOYAMA

2. Purpose of Education

We have provided medical students and graduates with the opportunity to obtain the ability to identify important clinical problems and to solve them by clinical reasoning through their active participation into the diagnosis and management of various rheumatic diseases.

3. Research Subjects

Following studies have been extensively carried out in our laboratory with various biochemical, immunological, molecular biological and statistical techniques:

- 1) Development of new therapeutics for the treatment of rheumatoid arthritis using cell cycle regulators.
- 2) Investigation of mechanism and development of new therapeutics for polymyositis.
- 3) The pathological role of chemokines/chemokine receptors in autoimmune diseases, including rheumatoid arthritis, polymyositis and scleroderma, for understanding their mechanisms and development of new therapeutics.
- 4) Investigation of role of BAFF/BLyS and Toll-like receptor in SLE.
- 5) Establishment of evidence-based treatment of rheumatic diseases.

4. Clinical Services

We have provided care to a large number of patients with diverse rheumatic diseases with 24,033 clinic visits and 299 hospital admissions in 2009. We have aimed to practice evidence-based medicine and to provide care that is in accordance with the global standard. We have contributed to the development of potential new drugs and treatments through participation into industry- as well as investigator-initiated clinical trials for chemical and biological agents. We have also contributed to the refinement of the care of rheumatoid arthritis patients through the conduct of various pharmacovigilance studies.

5. Publications

Original Article

1. Miyasaka N. Adalimumab for the treatment of rheumatoid arthritis. *Expert Rev. Clin. Immunol.* 5(1):19-26, 2009
2. Miyasaka N, Kawai S, Hashimoto H. Efficacy and safety of tacrolimus for lupus nephritis a placebo-controlled double-blind multicenter study. *Mod. Rheumatol.* 19:606-615, 2009
3. Nishimoto N, Miyasaka N, Yamamoto K, Kawai S, Takeuchi T, Azuma J, Kishimoto T. Study of Active controlled Tocilizumab monotherapy for Rheumatoid Arthritis Patients with an Inadequate Response to Methotrexate

- (SATORI) : significantly reduction in disease activity and serum vascular endothelial growth factor by IL-6 receptor inhibition therapy. *Mod. Rheumatol.* 19:12-19, 2009
4. Hashimoto J, Garnero P, D. van der Heijde, Miyasaka N, Yamamoto K, Kawai S, Takeuchi T, Yoshikawa H, Nishimoto N. A combination of biochemical markers of cartilage and bone turnover, radiographic damage and body mass index to predict progression of joint destruction in patients with rheumatoid arthritis treated with disease modifying anti-rheumatic drugs. *Mod. Rheumatol.* 19:273-282, 2009
 5. Komano Y, Harigai M, Koike R, Sugiyama H, Ogawa J, Saito K, Sekiguchi N, Inoo M, Onishi I, Ohashi H, Amamoto F, Miyata M, Ohtsubo H, Hiramatsu K, Iwamoto M, Minota S, Matsuoka N, Kageyama G, Imaizumi K, Tokuda H, Okochi Y, Kudo K, Tanaka Y, Takeuchi T, Miyasaka N. Pneumocystis jiroveci pneumonia in patients with rheumatoid arthritis treated with infliximab : a retrospective review and case-control study of 21 patients. *Arthritis & Rheum.* 61(3):305-312, 2009
 6. Nanki T, Takada K, Komano Y, Morio T, Kanegane H, Nakajima A, Lipsky PE, Miyasaka N. Chemokine receptor expression and functional effects of chemokines on B cells: Implication in the pathogenesis of rheumatoid arthritis. *Arthritis Res. Ther.* 11:R149, 2009.
 7. Watanabe K, Nanki T, Sugihara T, Miyasaka N. A case of polyarteritis nodosa with periurethral aseptic abscesses and testicular lesions. *Clin. Exp. Rheumatol.* 26:1113-1115, 2009
 8. Nii T, Kubota T, Nanki T, Komano Y, Harigai M, Kohsaka H, Hirose W, Nagasaka K, Sakurai T, Miyasaka N. Reevaluation of antibody titers 1 year after influenza vaccination in patients with rheumatoid arthritis receiving TNF blockers. *Mod. Rheumatol.* 19:216-218, 2009
 9. Nonomura Y, Mizoguchi F, Suzuki A, Nanki T, Kato H, Miyasaka N, Kohsaka H. Hypoxia-induced abrogation of contact-dependent inhibition of rheumatoid arthritis synovial fibroblast proliferation. *J. Rheumatol.* 36(4):698-705, 2009
 10. Nonomura Y, Miyabe Y, Tanaka M, Tsubata R, Nanki T, Harigai M and Miyasaka N. Prominent splenic microcalcification in patient with systemic lupus erythematosus complicated with antiphospholipid syndrome. *J Clin Rheumatol.* (in press).
 11. Kishi J, Nanki T, Watanabe K, Takamura A, Miyasaka N. A case of rituximab-induced interstitial pneumonitis observed in systemic lupus erythematosus. *Rheumatol.* 48:447-448, 2009
 12. Koike R, Harigai M, Atsumi T, Amano K, Kawai S, Saito K, Saito T, Yamamura M, Matsubara T, Miyasaka N. Japan College of Rheumatology 2009 guidelines for the use of tocilizumab, a humanized anti-interleukin-6 receptor monoclonal antibody, in rheumatoid arthritis. *Mod. Rheumatol.* 19:351-357, 2009
 13. Kubota T, Fukuya Y, Hashimoto R, Kanda T, Suzuki H, Okamura Y, Nanki T, Miyasaka N, Umezawa K. Possible involvement of chemokine-induced platelet activation in thrombophilic diathesis of antiphospholipid syndrome. *Ann. N.Y. Acad. Sci.* 1173:137-145, 2009
 14. Ohyanagi N, Ishido M, Suzuki F, Kaneko K, Kubota T, Miyasaka N, Nanki T. Retinoid ameliorates experimental autoimmune myositis, with modulation of Th cell differentiation and antibody production in vivo. *Arthritis Rheum.* 60:3118-3127, 2009.
 15. Nishimoto N, Miyasaka N, Yamamoto K, Kawai S, Takeuchi T, Azuma J. Long-term safety and efficacy of tocilizumab, an anti-IL-6 receptor monoclonal antibody, in monotherapy, in patients with rheumatoid arthritis (the STREAM study): evidence of safety and efficacy in a 5-year extension study. *Ann. Rheum. Dis.* 68:1580-1584, 2009
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 18. Takeuchi T, Miyasaka N, Inoue K, Abe T, Koike T. Impact of trough serum level on radiographic and clinical response to infliximab plus methotrexate in patients with theumatoid arthritis: results from the RISING study. *Mod. Rheumatol.* 19(5):478-87, 2009
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 20. Okiyama N, Sugihara T, Iwakura Y, Yokozeki H, Miyasaka N, Kohsaka H. Therapeutic effects of IL-6 blockade on a murine model of polymyositis that does not require IL-17A. *Arthritis Rheum.* 60 (8):2505-2512, 2009
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- Am80, on T helper cell development and antibody production in murine collagen-induced arthritis. *Mod Rheumatol.* 2009 Dec 29. [Epub ahead of print]
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