Asian IBD Symposium
Tokyo 2011

Date: November 13, 2011
Place: Hotel Laforet Tokyo
Opening Remarks
Toshio Hibi (Keio University School of Medicine)

Session 1  Recent progress of basic research in IBD
Chairs
- Mamoru Watanabe (Tokyo Medical and Dental University)
- Joo Sung Kim (Seoul National University)
- Yulan Liu (Beijing University People's Hospital)
Speaker
- Toshiro Satoh (Keio University School of Medicine)
- Byung Duk Ye (University of Ulsan College of Medicine)
- Zhanju Liu (Tongji University)
Commentator
- Masayuki Saruta (The Jikei University)

Session 2  New diagnostic approach in IBD
Chairs
- Soichiro Miura (National Defense Medical College)
- Dong Soo Han (Hanyang University)
- Pinjin Hu (Sun Yat-sen University)
Speaker
- Fumihito Hirai (Fukuoka University Chikushi Hospital)
- Zhi Hua Ran (Shanghai Jiao Tong University)
Commentator
- Masakazu Takazoe (Social Insurance Central Hospital)

Luncheon Satellite Symposium
Chair
Toshio Hibi (Keio University School of Medicine)
Speaker
Daniel K. Podolsky (UT Southwestern Medical Center)

Session 3  Surgical treatment of IBD
Chairs
- Iwao Sasaki (Tohoku Graduate School of Medicine)
- Gaun Am Song (Pusan National University)
Speaker
- Akira Sugita (Yokohama Municipal Hospital)
- Kazuhiro Watanabe (Tohoku Graduate School of Medicine)
Commentator
- Michio Itabashi (Tokyo Women’s Medical University)

Session 4  Medical treatment of IBD
Chairs
- Takayuki Matsumoto (Hyogo Medical University)
- Suk-Kyun Yang (University of Ulsan College of Medicine)
- Jianming Qian (Peking Union Medical College Hospital)
Speaker
- Yasuo Suzuki (Sakura Medical Center, Toho University)
- Jae Hee Cheon (Yonsei University College of Medicine)
- Minhu Chen (Sun Yat-sen University)
Commentator
- Reiko Kunisaki (Yokohama City University Medical Center)

Closing Remarks
KASID President, Korea
Asian IBD Symposium
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Welcome Message

Dear Colleagues,

In the last 50 years, Western countries had dramatical increase in the incidence of Crohn’s disease and ulcerative colitis. Indeed, we are facing the same trend happening in Japan where the incidence of IBD was less than 10,000 patients 30 years ago, increasing more than 10 times to more than 100 thousand patients at the present time. This same trend is also supposed to be observed in other Asian countries such as Korea and China now. In a past decade, many excellent researchers worked from our countries have been set a high valuation especially in the area of basic science. While in the area of clinical science, we still need to follow the results from pivotal and large scale clinical studies enforced in Western countries. However, since several of years ago, some new clinical message has been able to be dispatched from Japan regarding immunoregulatory therapies such as anti IL-6R antibody, cytapheresis or tacrolimus against refractory IBD.

Therefore, we decided to hold an Asian IBD Symposium Tokyo 2011 in November 2011 in Tokyo. The main objective of this symposium is to exchange up-to-date knowledge and expertise, both basic and clinical research in the field of IBD between Asian countries. The trend in which IBD is emerging in the Asia-Pacific region internationally raises many interesting points. We are lucky to invite the distinguished guest speakers from Korea and China in addition to 4 expert scientists from Japan. I would like to express my appreciation to all the speakers and other participants for their active cooperation and valuable contributions. I am confident that we will have an excellent symposium.

Finally, I thank to the financial supports of many pharmaceutical companies sponsoring this symposium. I hope this symposium will encourage young investigators in this particular field to develop further in the field of IBD research and clinical practices.

Toshifumi Hibi, M.D.
Congress President
Asian IBD Symposium Tokyo 2011
President
Japanese Society for Inflammatory Bowel Disease
Professor and Chairman
Department of Internal Medicine,
Keio University School of Medicine
General Information

Title
Asian IBD Symposium Tokyo 2011

Date
Sunday, November 13, 2011

Venue
HOTEL LAFORET TOKYO
7-36, Kita-Shinagawa 4-Chome, Shinagawa-ku, Tokyo
TEL:+81-(0)3-5488-3911

Language
Simultaneous translation for the Chinese, Korean and Japanese languages will be provided throughout the symposium session. All presentation will be given in speaker’s native language. Printed materials will be in English.

Organized by
Japanese Society for Inflammatory Bowel Disease

Homepage
http://asibd.jsibd.jp/

Secretariat for 2011 Asian IBD Symposium in Tokyo
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Session 1: Recent progress of basic research in IBD

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Session 4  Medical treatment of IBD

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University of Ulsan College of Medicine

Reiko Kunisaki  
Yokohama City University Medical Center
Asian IBD Symposium Tokyo 2011

Session 1

Recent progress of basic research in IBD
Establishment of intestinal stem cell culture system: from mouse to human

Department of Gastroenterology, School of Medicine, Keio University

Toshiro Sato

The intestinal epithelium is the most rapidly self-renewing tissue in adult mammals. Lineage tracing study demonstrated that Lgr5+ intestinal stem cells self-renew for long-term and produce all lineages of intestinal epithelial cells; enterocytes, goblet cells, enteroendocrine cells, Paneth cells. Recently, we developed a novel mouse intestinal stem cell culture system, in which Lgr5+ stem cells can form long-lived, self-organizing organoids under the presence of EGF, noggin and R-spondin1. R-spondin turned out to be a ligand for Lgr5 and activates canonical Wnt signal along with Wnt ligand. We found that Paneth cells, one of the daughter cells, express Wnt-3, EGF and Notch ligand, and function as stem cell niche in mouse small intestine. As is the case for other adult human tissue stem cell culture system, the human intestinal stem cells are vulnerable to cellular senescence hindering long-term culture. We modified the mouse intestinal stem cells culture system by the addition of Wnt3A, Alk4/5/7 inhibitor, p38 inhibitor and nicotinamide, enabling single human intestinal stem cells to grow clonologically for long term (>6 months). The technology was used to study metaplastic (Barrett epithelium), inflammatory (inflammatory bowel disease), or neoplastic tissues (intestinal adenoma and cancer) from the human gastrointestinal tract. Furthermore, it was demonstrated that the organoids integrated into epithelial defect in mouse colitis model and accelerated intestinal mucosal healing.
Recent Developments in IBD Genetics

Byong Duk Ye, M.D., Ph.D.

Recent Developments in IBD Genetics

Inflammatory bowel disease (IBD) comprising Crohn’s disease and ulcerative colitis is an inflammatory disorder of gastrointestinal tract characterized by chronic relapsing and remitting course. Although the precise etiopathogenesis of IBD remains unclear, IBD is considered to be caused by a disruptive interaction between the immune system and gut microbiota in genetically predisposed individuals. After the discovery of mutations in NOD2/CARD15 gene associated with ileal Crohn’s disease, numerous additional genetic variants and loci have been found to be associated with IBD susceptibility and specific phenotypes. Recent genome-wide association studies have revolutionized the genetics of complex diseases and have revealed approximately 100 distinct genetic loci that are significantly associated with IBD. These loci encode genes involved in diverse pathophysiologic mechanisms, including microbe recognition, lymphocyte activation, cytokine signaling, autophagy, and intestinal epithelial defense. Although the incidence and prevalence of IBD continue to rise in Asia, presumably due to the westernization of lifestyles, the epidemiologic and clinical features of Asian IBD patients appear to be different from those of Western patients, including gender ratio, phenotypes, and long-term course of disease. In addition, a number of reports suggest the different genetic susceptibilities of Asian IBD patients from those of Western IBD patients, as revealed in the studies on NOD2/CARD15, TLR, IL23R, ATG16L1, and TNFSF15 genes. A better understanding of the genetic characteristics of Asian IBD patients as well as the recent advances in IBD genetics will bring improved insights into the pathogenesis of IBD in Asians.
IL-25 is decreased in inflammatory bowel disease and inhibits Th1 and Th17 cell differentiation

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Zhanju Liu, Jinling Su, Tengfei Chen, Praveen K. Yadav

**Background:** Evidences have shown that IL-25 could suppress the initiation and progression of immune-mediated pathologies. Herein we investigated expression of IL-25 in inflammatory bowel disease (IBD) and its role in induction of IBD CD4+ T cell differentiation.

**Methods:** The expressions of IL-25 and IL-25R in the colonic mucosa of IBD patients were detected by quantitative real-time PCR and immunohistochemistry, and serum levels of IL-25 were measured by ELISA. The correlation between IL-25 and endoscopic scores and CRP was evaluated. Peripheral blood (PB)- and lamina propria (LP)-CD4+ T cells isolated from IBD patients and healthy controls were stimulated with anti-CD3 and anti-CD28 mAbs in the presence of IL-25, and transcription factor levels were determined with quantitative real-time PCR.

**Results:** Expression of IL-25 was found to be significantly decreased in the sera and inflamed mucosa of patients with active Crohn’s disease (CD) and ulcerative colitis (UC) compared with that in IBD patients at remission stage and healthy controls. IL-25 was found to be upregulated in sera of IBD patients after treatment with Infliximab. The number of IL-25+ cells in inflamed mucosa and the levels of IL-25 in sera from IBD patients were inversely correlated with endoscopic scores for colonic mucosa and CRP respectively. IL-25 could inhibit the differentiation of IBD CD4+ T cells into Th17 cells (i.e., decreased expression of IL-17A and RORC), and downregulate CD CD4+ T cells to differentiate into Th1 cells (i.e., decreased expression of T-bet and STAT4), but did not interfere with Th2-associated transcription factor expression (i.e., GATA3 and STAT6). Importantly, blockade of IL-10 secretion by IBD CD4+ T cells markedly attenuated the inhibitory role of IL-25 in modulating both Th1 and Th17 immune responses.

**Conclusion:** IL-25 is markedly decreased in inflamed mucosa of IBD and involves in intestinal mucosal inflammation and disease activity. It could inhibit IBD CD4+ T cell differentiation into Th1/Th17 cells in an IL-10-dependent manner. These data suggest that IL-25 may be a potential therapeutic agent for IBD.
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Session 2

New diagnostic approach in IBD
Diagnostic approach using double balloon enteroscopy in Crohn’s disease

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Fumihito Hirai, Takahiro Beppu, Toshiyuki Matsui

Endoscopic modalities for the small intestine, such as capsule endoscopy (CE) and double balloon enteroscopy (DBE), have been developed and widely used in the diagnosis and evaluation of disease activity in Crohn’s disease (CD). In this presentation, I would like to talk about the usefulness of DBE for CD, focusing on mucosal healing (MH) and early diagnosis.

Today, MH is considered a treatment goal of inflammatory bowel diseases. However, MH is not achieved in the majority of patients. Therefore, we evaluated bowel lesions in CD using DBE before and after Infliximab (IFX) treatment. There is no standard definition of MH. In our study, MH was defined as the complete absence of mucosal ulcerations observed before IFX treatment. MH was observed in six of twenty-one patients (29%) with small-intestinal lesions compared with seven of eleven patients (64%) with colonic lesions. With regard to MH in the small intestine, several issues have to be resolved, such as the evaluation methods and type of effective treatment.

Aphthous lesions have been identified as early lesions of CD. In Japan, it has also been recognized that CD of aphthous type (type A CD)—patients who have only aphthous lesions without the typical CD lesions—is an early stage of CD. In terms of treatment strategy, it is important that CD be correctly diagnosed in the early phase. Because CT and MRI are unable to detect small lesions, DBE and colonoscopy are useful for diagnosis in type A CD. By means of endoscopy and pathological findings according to Japanese criteria, we diagnosed 19 patients as having type A CD during the period 2005 to 2011. These 19 patients (8.5%) were among 223 patients diagnosed with CD at our hospital. In a similar study conducted in 2004, this ratio was 5.2%. It is suggested that new modalities have improved the diagnostic yield of type A CD. We believe that early diagnosis leading to early treatment will facilitate control of the disease.

In conclusion, it is important that new modalities be used properly, and correct diagnosis and effective treatment are necessary in patients with CD.
To date, few studies have connected computed tomography enterography (CTE) findings with endoscopic severity in small-bowel Crohn's disease. Therefore, we evaluated the accuracy of CTE in assessing colonic inflammation, and compared its accuracy with double-balloon enteroscopy (DBE) in small-bowel Crohn's disease. Data were retrieved from our inpatient database since October 2007. Correlations of CT scan parameters (CT bowel enhancement, vascular enlargement of the vasa recta, and mesenteric fat density), endoscopy, histology severity scores, CDAI, and CRP were assessed with Spearman’s rank correlation and logistic regression. Seventy-one patients were enrolled in the study. Of 33 patients with suspected small-bowel lesions, 22 patients were diagnosed to be Crohn’s disease with DBE. Furthermore, one patient with jejunal lymphoma and one patient with vascular malformation of the ileum were identified by DBE. The diagnostic yield was 63.6%. The sensitivity and specificity for diagnosis of small-bowel Crohn’s disease were 95.5% and 90.9% by CTE, respectively. For 60 established small-bowel Crohn’s disease, endoscopic score was significantly correlated with CT bowel enhancement, comb sign, fat density, and total CTE scores (All p<0.001). CTE scores were significantly correlated with CRP, CDAI, and histological inflammation scores (All p<0.001). In conclusion, both CTE and DBE are accurate diagnostic techniques for patients with suspected CD. CTE also provides accurate information on disease activity in small-bowel Crohn’s disease, with satisfactory consistency with inflammatory markers, CDAI, and histopathology.
Molecular Pathogenesis of IBD: Current Paradigms

Philip O’Bryan Montgomery Jr., M.D. Distinguished Presidential Chair in Academic Administration
Doris and Bryan Wildenthal Distinguished Chair in Medical Science

University of Texas Southwestern Medical Center, Dallas, Texas USA

Daniel K. Podolsky, M.D.

Although gaps in our understanding of the pathogenesis of inflammatory bowel disease remain, progress over the past several years has resulted in an increasingly coherent picture of the factors which collectively lead to the development of the major forms of inflammatory bowel disease. Much of this progress has been stimulated by the identification of several susceptibility genes that confer risk of the major forms of inflammatory bowel disease. Aggregated data from multiple GWAS (Genome-Wide Association Studies) have now identified as many as seventy genes which affect an individual’s susceptibility to inflammatory bowel disease. It should be noted that the relative importance of these among different populations requires further study with a demonstration of substantial differences in the impact of the first IBD gene identified (NOD2) among Western and Asian populations.

While the significance of many risk genes remains to be determined, initial characterization has led to new insights into disease mechanisms. Identification of some of these gene products as well as independent functional studies have underscored the critical role of the epithelial cell population in inflammatory bowel disease. Overall, the epithelial layer provides an essential barrier function. Deficiencies in the integrity of this barrier function clearly confer susceptibility to inflammatory bowel disease. Recent work has made clear that innate immune receptors substantially regulate epithelial function. Recent studies have also pointed to another key underlying molecular mechanism which may compromise epithelial function. Inflammatory bowel disease has been found to be associated with alterations in the unfolded protein response (UPR), a basic cellular mechanism that ensures degradation of defective protein.

As noted, the first gene found to confer risk of IBD is a pattern recognition receptor, NOD2, that recognizes a fragment of bacterial cell wall. Alterations in this gene and others responsible for innate immune recognition and downstream cell activation (e.g., TLRs) results in impaired handling of interactions with bacteria, and most importantly, reduced ability to effectively kill invasive microbes.

In this context, characterization of susceptibility genes has also pointed to the relevance of basic molecular mechanisms that ultimately determine the ability of mucosal cells to appropriately respond to and kill invasive bacteria through a process called autophagy. A number of IBD variant susceptibility genes (e.g., ATG16L1 and IRGM) result in altered autophagic capability, suggesting that an important stimulus for ongoing inflammation in IBD is the defective innate immune response pathways and the inability to control interactions with bacteria through normal autophagic
Collectively, the alterations in epithelial function and pathways of innate immune response are critical in the initial cascade of events that result in inflammatory bowel disease. It is evident that subsequent involvement of adaptive immune processes is essential to sustaining the ongoing and chronic inflammation. Th1 cells driven by the IL12/IL23 axis ultimately producing IFN-γ (pathways implicated by genetic analysis) as well as select NK populations are critical in the sustained immune response in Crohn’s disease. In addition to the long recognized Th1 and Th2-like effector cells, it has become clear that activation of Th17 cells is key to the inflammatory infiltrate. Production of IL17 and related cytokine family members results in activation of many other pro-inflammatory cell populations that ultimately contribute to tissue injury and destruction. This activation of effector T-cells is intensified by a relative reduction in regulatory T-cells in IBD patients. Thus, the chronic immune inflammatory activation which is a hallmark of IBD is the result of defective epithelial function and alterations in innate immunity leading to unrestrained adaptive immune and inflammatory activity.

The final piece of this puzzle that has been significantly clarified is the essential role that the luminal flora plays in driving these responses. Both circumstantial observations in patients and direct experimental evidence in murine models make clear that the luminal bacteria are an essential co-factor, in the absence of the stimulus they provide to the post-processes even susceptible hosts fail to develop inflammation. It remains to be determined which constituents within the enormously complex flora are critical in stimulating the pathways which eventuate into inflammatory bowel disease.

In summary, great progress has been made in defining key components of the pathogenesis of inflammatory bowel disease. This progress is already providing new approaches to the development of better therapeutic intervention, even as work continues to fill in the remaining gaps in our understanding of IBD pathogenesis.
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Session 3

Surgical treatment of IBD
Recent advance of surgical treatment for ulcerative colitis and the prognosis of Crohn’s disease patients with rectal cancer

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Matsushima Clinic***


**Aim:** Surgical treatment is necessary for IBD patients who do not respond medical treatment including new treatment such as infliximab or who had colitic cancer. Recent advance of surgical treatment in ulcerative colitis and the prognosis of Crohn’s disease patients with rectal cancer were evaluated.

**Results:**
1) Ulcerative colitis (UC)
Surgical indication was analyzed in our 503 surgical patients. The incidence of severe colitis, intractability, cancer or dysplasia was 31%, 69%, 10%, respectively. ‘Intractability’ contains medical failure, extraintestinal complications such as pyoderma gangrenosum and growth retardation with pediatric patients. New surgical indication should be included in ‘intractability’, which is difficulty of bowel function such as urgency, or patients’ request of treatment without recurrence of UC for their school, or work.
Re-ileal pouch anal anastomosis (Re-IPAA) was performed in 6 patients because of 3 patients with pouchvaginal fistula, 2 with pelvic sepsis, one with strangulation obstruction. Postoperative clinical course was uneventful in 3. However, reIPAA was unsuccessful in 3 patients (2 pelvic sepsis, one poor anal sphincter function).
2) Crohn’s disease:
Surgical indication for initial intestinal Crohn’s disease (n=532) in our series was stricture(53%), intestinal fistula(26%), abscess(6.5%), perforation(4.8%), medical intractability(4.8%), massive bleeding(2.3%) and colorectal cancer(2%). Cumulative 5 and 10 years reoperation rate for recurrent intestinal disease was 35%, 67%, respectively.
Rectal cancer including cancer of anal fistulae with Crohn’s disease was found 1.4% (16 including 5 cancer of anal fistulae) in 1120 Crohn’s disease patients in our series. Six patients (four with abdominoperineal resection, one with pelvic excenteration, one with chemotherapy) died for advanced cancer and 10 patients are alive, most of whom were operated at early cancer stage (stage I, II).
**Conclusion:** In ulcerative colitis, surgical indication should be enlarged for patients with intractability because of good postoperative clinical course in pouch surgery. ReIPAA become the alternative for the patients with poor postoperative clinical course, especially for the patients who have pouch problems such as pouch vaginal fistula without serious septic complication in the pelvis.

In Crohn’s disease, the prognosis of patients with rectal cancer including cancer of anal fistulae was poor because of advanced cancer. Optimal cancer surveillance program is necessary to find early colorectal cancer with Crohn’s disease.
Objective:
Intestinal failure (IF) is one of the most serious late surgical complications in patients with Crohn’s disease (CD). The aim of this study is to clarify the incidence and characteristics of IF in CD patients.

Patients and Methods:
The present study was performed at the 14 hospitals in Japan, which were participated in the study group of IBD, sponsored by the Japanese Ministry of Health, Labour and Welfare. The number of CD patients who underwent initial intestinal surgery at any of the 14 hospitals between 1970 and 2009 was collected (n=1703). Of these patients, patients who developed IF were reviewed (n=68) and incidence of IF was evaluated using the Kaplan-Meier method. In addition, IF patients, who underwent initial intestinal surgery at other hospitals and now treated at any of the 14 hospitals, were also reviewed (n=41). Then, a total of 109 IF patients were collected and the characteristics of IF patients were reviewed.

Results:
The occurrence of IF after the initial intestinal surgery was <1% (5 years), <5% (10 years), and <10% (20 years), respectively. Mean age at CD diagnosis, initial intestinal surgery, IF occurrence, and present was 22, 28, 38, and 46 years, respectively. Mean number of surgery per patient was three. Mean length of the remnant small bowel was 163 cm. Twelve IF patients were dead because of septic shock (n=4), cancer (n=4), liver dysfunction (n=2), suicide (n=1), and bowel perforation (n=1).

Conclusion:
There is a pressing need to develop strategies for prevention and management of IF.
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Session 4

Medical treatment of IBD
Recent Advances in the Medical Therapy of Patients with Inflammatory Bowel Disease in Japan

Internal medicine, Sakura Medical Centre, Toho University

Yasuo Suzuki, M.D., Ph.D.

In Japan, medical therapy of patients with inflammatory bowel diseases (IBD) has recently improved significantly with the introduction of therapeutic leucocytapheresis (CAP), tacrolimus (Tac) and anti-TNF-α biologics like infliximab (IFX) and adalimumab (ADA). Further, in patients with ulcerative colitis (UC), a pH dependent release mesalazine formulation has become available for patients with mild to moderately active ulcerative colitis (UC) in addition to sulphasalazine and the time-dependent release mesalazine. Likewise, intensive CAP is now available for steroid refractory and steroid dependent patients with severe UC, while IFX and Tac/cyclosporin A (CsA) have shown efficacy in patients with severe steroid refractory UC. Additionally, an anti-viral agent may be used in patients with intractable IBD who are infected with cytomegalovirus as cytomegalovirus infectious enterocolitis is now recognized to be a major factor for UC to become intractable.

In Crohn’s disease (CD), IFX now has a validated indication and has largely replaced nutritional therapy, corticosteroids and thiopurines (AZA/6-MP). It should be appropriate to say that IFX has significantly improved the quality of life of patients with CD and is expected to have a significant impact on long-term disease course in this clinical setting. Recently, ADA has become available as a newer anti-TNF, offering greater option to select anti-TNF biologics, especially for patients with loss of response to IFX. Similarly, as a non-pharmacologic and safe therapeutic intervention, selective granulocyte and monocyte apheresis (GMA) has been approved for patients with CD and is expected to show significant efficacy in patients with CD like UC.

In this section, attempt is being made to highlight the efficacy of Tac, CsA, and intensive CAP in patients with UC together with the efficacy of IFX and ADA in patients with CD based on our own experiences with these modalities. Additionally, our treatment strategy for patients with IBD is introduced.
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Efficacy of infliximab in intestinal Behçet’s disease - A Multicenter retrospective study

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Jae Hee Cheon, Jin Ha Lee, Seong Woo Jeon, Dong Soo Han, Byong Duk Ye, Young Ho Kim, Kang Moon Lee, Jong Pil Im, Eun Young Kim, Chang Kyun Lee, Byung Ik Jang, Joo Sung Kim, Suk-Kyun Yang, Hyo Jong Kim, Won Ho Kim

Background/aims: To date, the literal short and long-term efficacies of treatment with infliximab for intestinal Behçet’s disease (BD) remain unknown. We investigated the response rate of infliximab in intestinal BD and related predictive factors of sustained response of infliximab treatment.

Methods: Data were obtained using a retrospective, uncontrolled chart review at 8 tertiary hospitals in Korea. Clinical, demographic, and laboratory data were collected for intestinal BD patients who received at least one dose of infliximab. Response rate of infliximab at 2, 4, 30, and 54 weeks and predictive factors of sustained response were investigated. Adverse events were also identified.

Results: A total 28 patients with BD were included in this study. The median age at diagnosis of intestinal BD was 35 years and median follow-up duration after initial infliximab infusion was of 29.5 months. The clinical responses at 2, 4, 30, and 54 weeks were 75, 64.3, 50, and 39.1%, respectively, with clinical remission rates at 2, 4, 30, and 54 weeks being 32.1, 28.6, 46.2, and 39.1%, respectively. In multivariate analysis, older age at diagnosis (≥40 years), female sex, a longer disease duration (≥5 years), concomitant immunomodulator use, and remission at 4 week were found to be predictive factors of sustained response. There was one serious infection but no malignancies or deaths occurred.

Conclusions: Infliximab was a well-tolerated and effective therapy for moderate to severe intestinal BD. Older age at diagnosis, female sex, longer disease duration, concomitant immunomodulator use, and remission at 4 weeks were predictive factors of sustained response.
Comparison of Mucosal Healing Rates Induced by Medical Treatments for Crohn’s Disease: Experience from One Center

The First Affiliated Hospital of Sun Yat-sen University, Guangzhou, China

Prof. Minhu Chen

Due to the long term benefit of low relapse rate and low intestinal resection rate, mucosal healing become the new endpoint for the medical treatment of Crohn’s disease. To compare the traditional regimen (5-aminosalicylates and azathioprine) with biological agent (infliximab) on the effect of mucosal healing evaluated the comparative effects of mucosal healing in Crohn’s disease patients, we conducted a prospectively open labeled trial. Eighty-four patients were recruited in the study, 29 in 5-ASA, 40 in AZA and 15 in IFX group respectively. Sixty-two patients completed 1-year and 52 cases completed 2-year follow-up. The endoscopic severity of the ulcerated lesions and all lesions were separately recorded and graded using CDEIS. There was no significant difference in clinical outcomes at the end of 1-year among 3 groups (P>0.05). However, 10.3%, 25% and 60% of the patients in the group of 5-ASA, AZA and IFX achieved mucosal healing after one year’s follow-up (P<0.05). Of 52 patients completed 2-year study, 41 patients remained remission and 11 patients relapsed at the end of year 2. Multivariate analyses identified that mucosal healing at 1 year was the only predictive factor for maintaining clinical remission (OR=9.524, 95%CI: 1.115-81.345, P=0.039).