### 厚生労働科学研究費補助金 (難治性疾患政策研究事業) 難治性炎症性腸管障害に関する調査研究 総括/分担研究報告書 (令和4年度)

### 難治性炎症性腸管障害に関する調査研究 総括研究報告

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研究要旨:難治性炎症性腸疾患(潰瘍性大腸炎・クローン病)および希少難病(クロンカイトカナダ症候群等)に関する疫学調査研究、診断基準・治療指針作成、実地医家への啓発活動を通じて、患者QOL向上と医療経済への貢献を目指す。特に重点課題として各種レジストリ研究、緊急課題としてCOVID-19対応をあげ令和4年度は治療指針作成、小児から成人へのトランジションに関するコンセンサスステートメント作成、IBD患者におけるワクチン接種に関するコンセンサスステートメント、難病プラットフォームとの連携によるレジストリ構築、COVID-19に関する多施設共同研究など多くの課題で目標を達成し成果をあげた。

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### A. 研究目的

難治性炎症性腸疾患(潰瘍性大腸炎・クローン

病)および希少難病(クロンカイトカナダ症候群、非特異的多発性小腸潰瘍症(田口班)、家族性地中海熱関連腸炎(AMED 仲瀬班)、腸管型ベーチェット(岳野班))に関する疫学調査研究、診断基準・治療指針作成、実地医家への啓発活動を通じて、患者 QOL 向上と医療経済への貢献を目指す。

### B. 研究方法

研究班は消化器内科、外科、小児科、疫学統計から構成され領域横断的研究を可能とする。研究プロジェクトは大きく6項目からなり、特に重点プロジェクトではレジストリ研究を中心に推進し、難病プラットフォームを積極的に利用する。また、他の研究班、学会、AMEDと緊密な連携をとっていく。患者参加型双方向性研究を取り入れながら国民と実地医家への啓発活動を行う。緊急プロジェクトとしてCOVID-19に関する情報発信、疫学調査研究などを推進する。

- 1.総括的疫学解析プロジェクト
- 2.診断基準・治療指針改訂プロジェクト
- 3.重点プロジェクト

生物学的製剤新規導入患者レジストリ構築、新規診断 IBD 患者レジストリ、炎症性腸疾患外科手術例のレジストリ構築、クローン病関連癌サーベイランス法の確立、潰瘍性大腸炎関連癌内視鏡治療例のレジストリ構築、IBD 患者における妊娠・出産のレジストリ構築、高齢 IBD 患者レジストリ)、

- 4.緊急プロジェクト IBD 患者における新型コロナウィルス感染情報の収集と情報発信
- 5.国民啓発と実地医家啓発プロジェクト
- 6.腸管希少難病に関する実態調査と啓発活動プロジェクト

クロンカイトカナダ症候群、非特異性多発性小 腸潰瘍症(田口班)、腸管ベーチェット病(岳野 班、AMED 水木班)、家族性地中海熱関連腸炎 (AMED 仲瀬班)

### (倫理面への配慮)

レジストリ研究等については中央一括審査に により各施設の倫理委員会の承認を得て行 う。

### C. 研究結果

令和4年度成果を以下に示す。

- 1) 最新の治療に対応した<u>潰瘍性大腸炎・クローン病診断基準・治療指針令和3年</u>度改訂版を公開した。
- 2) 多施設共同研究として日本人 COVID-19 感染 IBD 患者のレジストリ研究(J-COSMOS)や COVID-19 が患者行動変容に与えた影響の調査(J-DESIRE)、日本人炎症性腸疾患患者におけるCOVID-19 ワクチン接種に対する免疫応答と安全性の検討によるワクチン接種の適正化(J-COMBAT)が推進された。すでに3試験ともにデータ収集は終了し、J-COSMOS の中間報告と J-DESIRE の結果が J. Gastroenterology 誌に掲載された。J-COMBAT、J-COSMOS の最終結果についても英文誌に投稿中である。
- 3) 各レジストリ研究の立ち上げ。難病プラットフォームを利用するプロジェクト (新規発症、外科治療、高齢、妊娠・出産) については<u>難病プラットフォームとの契約を締結</u>し、中央一括審査の申請中である。潰瘍性大腸炎関連癌内視鏡治療例については日本内視鏡学会との連携によりすでに300例ほどのデータが集積しその解析結果は英文誌に論文投稿中である。生物学的製剤新規導入患者レジストリについても関連学会等との連携の上で進行中である。
- 4) 国民啓発と実地医家啓発プロジェクトと しては<u>患者を含めた双方向性研究</u>として 食事療法の見直しを進め患者を含めた研

究立案のための会合が開催された。青黛 内服患者の実態調査(二次次調査)が行 われ<u>コンセンサスステートメントが公開</u> された。

- 5) 腸管希少難病に関する実態調査と啓発活動プロジェクトでは岳野班と協力して腸管ベーチェット重症度基準の作成に着手し原案が完成した。AMED 水木班のレジストリ研究への引き続き協力している。クロンカイトカナダ症候群については診断カラーアトラスが公開され、海外に向けて英文書籍化された。。また、データベースについて難病プラットフォームと利用契約締結に至った。非特異性多発性小腸潰瘍症(田口班)、家族性地中海熱関連腸炎(AMED 仲瀬班)についても関連研究班と連携しプロジェクトを進めている。
- 6) 小児〜成人のトランジションについては プロジェクトチームが発足し、<u>本邦初の</u> トランジションに関するエキスパートコ <u>ンセンサスが作成・</u>公開され、英文論文 化された。<u>IBD</u> 患者におけるワクチン 接種に関するエキスパートコンセンサス が作成されホームページ上で公開され た。英文論文化された。

### D. 考察

令和2年度に日本消化器病学会との共同作業 として IBD 診療ガイドライン改訂版を公開 しているが、本領域の治療の進歩は目覚まし く、新たな治療薬を含めて本年度も令和4年 度改訂版診断基準・治療指針を公開した。本 研究班の特色である目的を絞ったレジストリ 構築については難病プラットフォーム利用締 結も終了し、中央一括審査による倫理審査を 申請中である。契約締結に時間がかかり、運 用開始が当初の計画より少し遅れているが実 施に大きな影響はないと考えている。潰瘍性 大腸炎関連癌内視鏡治療例のレジストリ構築 についてはすでに日本消化器内視鏡学会との 連携により300例ほどの貴重なデータが集ま り解析結果は英文誌に投稿中と予定以上の進 捗である。また、本研究班の大きな特徴とし

て小児科を含む多領域から構成されているこ とが挙げられるが、小児 IBD 医との連携で 小児 IBD 治療指針改訂版を作成した。さら に、本邦初の試みである IBD 患者における ワクチン接種に関するエキスパートコンセン サスを小児科医と内科医の連携で作成し令和 3年度に公開したが、本年度はその結果を英 文化した。さらに本邦初のトランジションに 関するエキスパートコンセンサス作成が終了 し Web 公開、英文論文化された。これまで 行われてこなかった患者参加型のプロジェク トとして食事療法・食事指導の見直しが行わ れており、患者参加型の研究立案を目指して プロジェクトの段階から患者が参加してい る。 令和 2-4 年度は COVID-19 に対する対 策が重要な課題であった。この間、タスクフ オースによる定期的な情報発信や診療に関す る各種提言を行ってきた。さらに日本人 COVID-19 感染 IBD 患者のレジストリ研究 (J-COSMOS) や COVID-19 が患者行動変 容に与えた影響の調査 (J-DESIRE)、日本 人炎症性腸疾患患者における COVID-19 ワ クチン接種に対する免疫応答と安全性の検討

COMABT) の3試験が研究班主導で行われており、J-COSMOS中間成績とJ-DESIRE は英文論文として発表された。希少疾患についても他の研究班と緊密な連携のもとに進められており、クロンカイトカナダ症候群については世界初のカラーアトラスが公開され、英文書籍化された。またレジストリ研究についても難病プラットフォームとの利用契約が締結された。

によるワクチン接種の適正化(J-

今後の課題は構築した各種レジストリの運用開始、COVID-19に関する疫学調査研究の最終結果の公開、小児~成人のトランジションについての評価と実臨床での実用化、患者を含めた双方向性の取り組みの推進と考えられる。さらにAMEDとの協力のもと、病態に

迫る新たな研究の推進・バックアップも行っていきたい。

### E. 結論

消化器内科、外科、小児科、疫学統計専門家からなる研究班により、炎症性腸疾患診断基準・治療指針の作成、レジストリ研究の立ち上げ、COVID-19への対応、患者と実地医家への啓発活動、希少疾患のレジストリと啓発活動の推進を行った。

### F. 健康危険情報 該当なし

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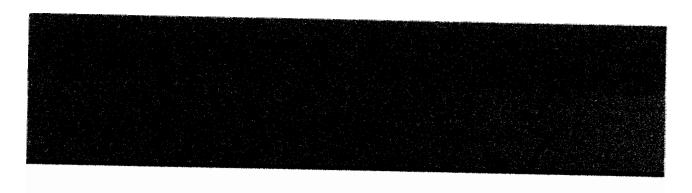
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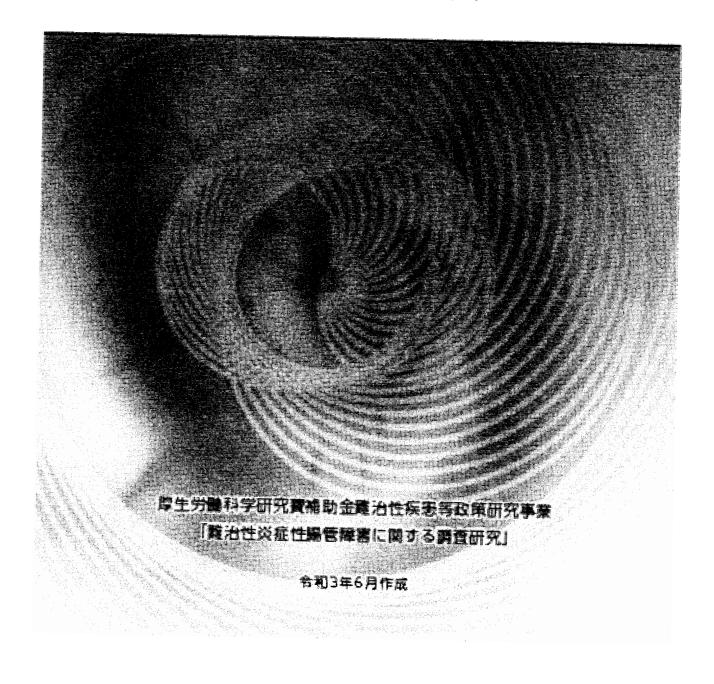
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  - 特許取得
     該当なし

(予定を含む)

2. 実用新案登録 該当なし



# Cronkhite-Canada症候群 内視鏡アトラス



### 資料2





### ORIGINAL ARTICLE—ALIMENTARY TRACT

# Expert consensus on vaccination in patients with inflammatory bowel disease in Japan

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**Abstract** Immunosuppressive therapies can affect the immune response to or safety of vaccination in patients with inflammatory bowel disease (IBD). The appropriateness of vaccination should be assessed prior to the initiation of IBD treatment because patients with IBD frequently undergo continuous treatment with immunosuppressive drugs. This consensus was developed to support the

decision-making process regarding appropriate vaccination for pediatric and adult patients with IBD and physicians by providing critical information according to the published literature and expert consensus about vaccine-preventable diseases (VPDs) [excluding cervical cancer and coronavirus disease 2019 (COVID-19)] in Japan. This consensus includes 19 important clinical questions (CQs)

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### ORIGINAL ARTICLE—ALIMENTARY TRACT





# Anxiety and behavioral changes in Japanese patients with inflammatory bowel disease due to COVID-19 pandemic: a national survey

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#### **Abstract**

Background Given the increasing health concerns for patients with inflammatory bowel disease (IBD), amidst the COVID-19 pandemic, we investigated the impact of the

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pandemic on the anxiety and behavioral changes in Japanese patients with IBD.

*Methods* We analyzed 3032 questionnaires from patients with IBD, aged 16 years or older visiting 30 hospitals and 1 clinic between March 2020 and June 2021. The primary outcome was the score of the anxiety experienced by patients with IBD during the pandemic.

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### 資料4

### Guidelines

### A consensus statement on health-care transition for childhood-onset inflammatory bowel disease patients

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#### **Abstract**

Inflammatory bowel disease (IBD) is a chronic relapsing inflammatory disorder of the intestine. The incidence of IBD is increasing worldwide, including Japan, and in approximately 25% of all affected patients it is diagnosed before 18 years of age. For the health maintenance of such patients, planned transition to adult care systems is essential. Previous Japanese surveys have revealed gaps between adult and pediatric gastroenterologists with regard to their knowledge and perception of health-care transition for patients with childhood-onset IBD. In 2021–2022, several Web workshops to discuss issues related to the transitional care of IBD patients were held by the Ministry of Health, Labour and Welfare of Japan as part of their program for research on intractable diseases. Clinicians experienced in IBD treatment for pediatric and adult patients participated. As a result, this panel of adult and pediatric gastroenterologists developed five consensus statements on the issue of "transfer from pediatric to adult care" and nine statements on the issue of "addressing transitional care (transition program)." To address current gaps in health-care transition for childhood-onset IBD patients, a programmed approach to transition, and better partnerships between pediatric and adult gastroenterologists are indicated. It is hoped that this consensus statement will provide a basis for the development of appropriate guidelines for clinical practice.

**Key words** inflammatory bowel disease, referral form, statement, transfer, transition.

#### Introduction

Since about 2010, transition-related health-care intervention has been receiving attention in Japan. This can be defined as the "purposeful planned transition of adolescents and young adults with chronic physical and medical conditions from child-centered to adult-oriented health-care systems." This

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involves two components, whereby (i) the responsibility for health-care "transitions" from the parent/caregiver to the patient and (ii) the patient "transfers" from a pediatric to an adult provider. In other words, "transition care" refers to services that prepare young adults with chronic health conditions and their families to move from child-centered to adultoriented health-care systems, whereas "transfer of care" is the planned transfer of patients from pediatric services to doctors and other providers who care for adults.

Got Transition<sup>®</sup> is a national resource center for healthcare transition in the USA. It is a program run by the National Alliance to Advance Adolescent Health and funded through a cooperative agreement with the federal Maternal and Child







ORIGINAL ARTICLE - GASTROENTEROLOGY (EXPERIMENTAL)

### Functional analysis of mutant SLCO2A1 transporters found in patients with chronic enteropathy associated with SLCO2A1

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#### Key words

chronic enteropathy associated with SLCO2A1 gene, prostaglandin E2, SLCO2A1 transporter, small intestinal ulcer.

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#### **Abstract**

Background and Aim: Chronic enteropathy associated with the solute carrier organic anion transporter family member 2A1 (SLCO2A1), or CEAS, causes anemia and hypoalbuminemia in young people. Dysfunction of the SLCO2A1 transporter protein is thought to involve genetic mutation, but mutant proteins have not been functionally characterized. We examined the prostaglandin E<sub>2</sub> (PGE<sub>2</sub>) transport ability of recombinant SLCO2A1 proteins containing 11 SLCO2A1 mutations found in CEAS patients.

Methods: Wild-type and mutant SLCO2A1 proteins were forcibly expressed in Xenopus laevis oocytes, and measurements of PGE2 uptake and transport capacity were compared. The membrane protein topology and functionality of the eight SLCO2A1 mutations involving single-nucleotide substitutions were predicted using computer analysis.

**Results:** The extent of functional disruption of the 11 SLCO2A1 mutations identified in CEAS patients was variable, with 10 mutations (421GT, 547GA, 664GA, 770GA, 830dupT, 830delT, 940 + 1GA, 1372GT, 1647GT, and 1807CT) resulting in loss or reduction of PGE2 transport, excluding 97GC.

Conclusion: PGE<sub>2</sub> transport ability of recombinant SLCO2A1 in X. laevis oocytes was hindered in 10/11 SLCO2A1 mutations identified in patients with CEAS. Further studies on the relationships between the different mutations and PGE2 transport and clinical features, such as severity, are needed.

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### Introduction

Chronic nonspecific multiple ulcers of the small intestine (CNSU) were first described as a refractory small intestinal ulcer disease of unknown cause in 1968 by Japanese gastroenterologists, who proposed that it be considered a new disease entity. Patients with CNSU exhibit persistent anemia and hypoalbuminemia from a young age.<sup>2</sup>

A genetic component has long been suspected to contribute to the etiology of CNSU because of the family occurrence. In 2015, a genetic analysis that included cases of familial onset demonstrated that CNSU is inherited through autosomal recessive mutations of the solute carrier organic anion transporter family member 2A1 gene (SLCO2A1), which encodes SLCO2A1. The involvement of this prostaglandin transporter led to the proposal of a new disease concept: chronic enteropathy associated with SLCO2A1 (CEAS).3

In CEAS, multiple well-defined, circular or oblique ulcers are observed in the ileum, with most of the ulcerative lesions limited to the submucosa. 4 Some patients with stenotic lesions in the small intestine require a bowel resection. To date, no effective treatments are available for small bowel ulcers, and a better understanding of the pathophysiology of CEAS is needed to develop therapeutic strategies. While genetic analyses suggest that SLCO2A1 mutations are involved in the pathogenesis of CEAS, the functional alterations of each mutant transporter protein remain unclear. PGE<sub>2</sub> is involved in epithelial cell regeneration and tissue repair via EP receptors expressed on intestinal epithelial cells and SLCO2A1

### Ulcerative colitis complicated with linear immunoglobulin A bullous dermatosis



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#### **SUMMARY**

Linear immunoglobulin A (IgA) bullous dermatosis (LABD) is a rare disorder involving subepidermal blistering characterised by IgA deposition along the basement membrane. The clinical features of LABD are variable but can include bullae, vesicles and erythematous lesions. Histopathology reveals formation of subepidermal bullae and linearly deposition of IgA in the basement membrane of the epidermis. LABD has been reported as a rare complication of ulcerative colitis (UC). We report the case of a young woman with UC complicated by LABD. The latter manifested as vesicles with erythema on almost the entire body. A biopsy of the skin lesions revealed linear IgA deposits in the basement membrane according to a direct immunofluorescence assay. Prednisolone administration resulted in clinical remission of UC but poor improvement of skin lesions. Oral administration of diaminodiphenyl sulfone led to improvement of blisters. Thereafter, abdominal and skin symptoms did not recur and she was discharged from hospital.

#### **BACKGROUND**

Ulcerative colitis (UC) is a chronic inflammatory disease of the colon that causes symptoms such as haematochezia, diarrhoea and abdominal pain. The mechanisms involved in UC development are incompletely understood and the aetiology is not known. Factors such as heredity, intestinal bacteria and the environment have been suggested to be the cause of UC.<sup>12</sup> The latter elicits extraintestinal complications such as joint pain/arthritis, skin lesions, thrombosis and primary sclerosing cholangitis. Of these, skin lesions are associated with ~15% of patients with inflammatory bowel disease.3 Erythema nodosum, pyoderma gangrenosum and Sweet syndrome are major skin diseases associated with UC. In addition, the prevalence of

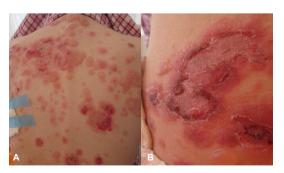


Figure 1 Skin lesions on hospital admission. (A) Erythema, blisters, erosions and pigmentation are mixed. (B) Blisters are found on erythema.

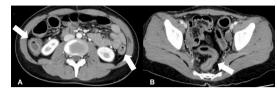


Figure 2 Contrast-enhanced CT scan of the abdomen on hospital admission. The wall of the (A) ascending colon, descending colon and (B) sigmoid colon is thickened. The lesions are shown with arrows.

skin lesions as complications associated with therapeutic agents taken to counteract UC (eg, the psoriasis-like rash that occurs during administration of antitumour necrosis factor-α preparations) has been increasing in recent years.

Linear immunoglobulin A (IgA) bullous dermatosis (LABD) is an autoimmune blister. It is characterised by immunohistology as linear deposition of IgA in the basement membrane and presents as a subepidermal blister. 4-11 LABD is associated with drug use and malignant tumours, but rare cases of LABD as a complication of UC have been reported.5-13 Here, we report LABD associated with UC.

### **CASE PRESENTATION**

The patient was a woman in her 20s with no family/ medical history of disease. She visited a hospital complaining of diarrhoea of several-month duration. She underwent colonoscopy and was diagnosed with pancolitis. UC treatment was started with 5-aminosalicylic acid (mesalazine; 3600 mg) which led to clinical remission, but UC relapse occurred 7 months later. Oral administration of prednisolone (PSL) 30 mg p.o. was started and symptoms improved. PSL was tapered off over 3 weeks, but the patient relapsed after discontinuation of PSL. At approximately the same time, she noticed itchy blisters on her right thigh. The skin lesions spread gradually throughout her body, and she subsequently developed a high fever, so she visited our hospital.

On consultation, consciousness was clear, blood pressure was 110/50 mm Hg, pulse was 72/min, respiratory rate was 18/min and body temperature was 38.2°C. She had mild tenderness in the lower abdomen. Pruritic erythematous plaques and overlying vesicles and bullae were present on almost the entire body except her face.

#### INVESTIGATIONS

Tight blisters and pustules were observed in some skin lesions (figure 1). Blood tests showed a potent

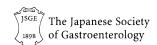


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### A review on the current status and definitions of activity indices in inflammatory bowel disease: how to use indices for precise evaluation

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Abstract Many clinical trials have been conducted for inflammatory bowel disease (IBD), so various clinical indices (CIs) and endoscopic indices (EIs) have also been evaluated. However, recently, with the progress of IBD management, review of established indices from previous studies, and establishment of new indices, the landscape of the use of indices in clinical trials have changed. We investigated the number and frequency of the indices adapted in recent clinical trials for ulcerative colitis (CI and EI) and Crohn's disease (CI, EI, index related to magnetic

resonance imaging, index for evaluating patient-reported outcomes, and health-related quality of life). Based on the results, we selected representative indices and further reviewed their content and characteristics. Moreover, various definitions, including clinical and endoscopic response or remission, have been described by means of representative indices in clinical trials.

**Keywords** Inflammatory bowel disease · Ulcerative colitis · Crohn's disease · Clinical index · Endoscopic index

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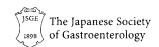
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### ORIGINAL ARTICLE—ALIMENTARY TRACT





# Interim analysis of a multicenter registry study of COVID-19 patients with inflammatory bowel disease in Japan (J-COSMOS)

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#### **Abstract**

Background The spread of coronavirus disease 2019 (COVID-19) had a major impact on the health of people worldwide. The clinical background and clinical course of inflammatory bowel disease (IBD) among Japanese patients with COVID-19 remains unclear.

*Methods* This study is an observational cohort of Japanese IBD patients diagnosed with COVID-19. Data on age, sex, IBD (classification, treatment, and activity), COVID-19

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symptoms and severity, and treatment of COVID-19 were analyzed.

Results From 72 participating facilities in Japan, 187 patients were registered from June 2020 to October 2021. The estimated incidence of COVID19 in Japanese IBD patients was 0.61%. The majority of IBD patients with COVID-19 (73%) were in clinical remission. According to the WHO classification regarding COVID-19 severity, 93% (172/184) of IBD patients had non-severe episodes, while 7% (12/184) were severe cases including serious conditions. 90.9% (165/187) of IBD patients with COVID-19 had no change in IBD disease activity. A logistic regression analysis stepwise method revealed that older age, higher body mass index (BMI), and steroid use were independent risk factors for COVID-19 severity. Six of nine patients who had COVID-19 after vaccination were receiving antitumor necrosis factor (TNF)-α antibodies.

Conclusion Age, BMI and steroid use were associated with COVID-19 severity in Japanese IBD patients.

**Keywords** COVID-19 · SARS-CoV-2 · Inflammatory bowel disease · Steroid · Anti-TNF- $\alpha$  antibodies

#### Introduction

The rapid spread of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) and the resulting coronavirus disease (COVID-19) have impacted patients and healthcare workers in clinical settings [1–3]. The older group of people have a higher incidence of contracting severe COVID-19 [4] since they have weakened immune functions, which is one of the risk factors of COVID-19 [5, 6]. However, in Japan, the impact of COVID-19 on patients





# Genetic Background of Mesalamine-induced Fever and Diarrhea in Japanese Patients with Inflammatory Bowel Disease

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### **Original Article**

### Crohn's Disease and Early Exposure to Thiopurines are Independent Risk Factors for Mosaic Chromosomal Alterations in Patients with Inflammatory Bowel Diseases



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#### **Abstract**

**Background and Aims:** Mosaic chromosomal alterations [mCAs] increase the risk for haematopoietic malignancies and may be risk factors for several other diseases. Inflammatory bowel diseases [IBDs], including Crohn's disease [CD] and ulcerative colitis [UC], are associated with mCAs, and patients may be at risk for haematopoietic malignancy development and/or modification of IBD phenotypes. In the present study, we screened patients with IBD for the presence of mCAs and explored the possible pathophysiological and genetic risk factors for mCAs.



<sup>&</sup>lt;sup>†</sup>These authors contributed equally to this work.

### 資料11

### 令和4年度 改訂版

(令和5年3月31日)

潰瘍性大腸炎・クローン病 診断基準・治療指針

厚生労働科学研究費補助金 難治性疾患政策研究事業

「難治性炎症性腸管障害に関する調査研究」(久松班)

令和4年度分担研究報告書



## 潰瘍性大腸炎治療における青黛、および青黛を含有する 漢方薬に関するコンセンサスステートメント

公開日 2022 年 10 月 7 日

難治性炎症性腸管障害に関する調査研究(久松班)

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- 5関西医科大学 内科学第三講座
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潰瘍性大腸炎に対し**青黛および青黛を含有する漢方薬を使用する際の**消化器内科医としてのコンセンサスステートメントとして下記を提案する。

☞青黛および青黛を含有する漢方薬の投与および投与を希望する患者に対しては、起こりうる有害事象に ついて十分に説明する。

## -妊娠を迎える炎症性腸疾患患者さんへ-知っておきたい 基礎知識 Q&A

厚生労働科学研究費補助金 難治性疾患政策研究事業

難治性炎症性腸管障害に関する調査研究(久松班)



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### 資料14

### Guidelines

### A consensus statement on health-care transition for childhood-onset inflammatory bowel disease patients

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#### **Abstract**

Inflammatory bowel disease (IBD) is a chronic relapsing inflammatory disorder of the intestine. The incidence of IBD is increasing worldwide, including Japan, and in approximately 25% of all affected patients it is diagnosed before 18 years of age. For the health maintenance of such patients, planned transition to adult care systems is essential. Previous Japanese surveys have revealed gaps between adult and pediatric gastroenterologists with regard to their knowledge and perception of health-care transition for patients with childhood-onset IBD. In 2021–2022, several Web workshops to discuss issues related to the transitional care of IBD patients were held by the Ministry of Health, Labour and Welfare of Japan as part of their program for research on intractable diseases. Clinicians experienced in IBD treatment for pediatric and adult patients participated. As a result, this panel of adult and pediatric gastroenterologists developed five consensus statements on the issue of "transfer from pediatric to adult care" and nine statements on the issue of "addressing transitional care (transition program)." To address current gaps in health-care transition for childhood-onset IBD patients, a programmed approach to transition, and better partnerships between pediatric and adult gastroenterologists are indicated. It is hoped that this consensus statement will provide a basis for the development of appropriate guidelines for clinical practice.

**Key words** inflammatory bowel disease, referral form, statement, transfer, transition.

#### Introduction

Since about 2010, transition-related health-care intervention has been receiving attention in Japan. This can be defined as the "purposeful planned transition of adolescents and young adults with chronic physical and medical conditions from child-centered to adult-oriented health-care systems." This

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involves two components, whereby (i) the responsibility for health-care "transitions" from the parent/caregiver to the patient and (ii) the patient "transfers" from a pediatric to an adult provider. In other words, "transition care" refers to services that prepare young adults with chronic health conditions and their families to move from child-centered to adultoriented health-care systems, whereas "transfer of care" is the planned transfer of patients from pediatric services to doctors and other providers who care for adults.

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