Abstract IDDF2021-ABS-0201 Figure 6

(IDDF2021-ABS-0201 Figure 3. The protein and mRNA levels of CD11b, CD86, CD163 in adenoma tissue of each group), proliferation and periodic proteins (Ki67, PCNA, Cyclin D1) (IDDF2021-ABS-0205 Figure 4. The protein levels of Ki-67, PCNA, and Cyclin D1 in adenoma tissue of each group) and various pro-inflammatory factors (IDDF2021-ABS-0201 Figure 5. The expression of protein and mRNA of inflammatory factors in adenoma tissue of each group) were elevated, and TLR4/NF-κB pathway (IDDF2021-ABS-0201 Figure 6. The expression of TLR4/NF-κB pathway proteins in adenomas tissue of mice in each group) was activated after using S.algae and its LPS to gavage mice.

Conclusions S.algae LPS may promote the occurrence and development of CRA in mice through M1 macrophages. S. algae LPS may promote the occurrence and development of CRA in mice through TLR4/NF-κB pathway.

IDDF2021-ABS-0212 **FECAL MICROBIOTA TRANSPLANTATION AMELIORATES EXPERIMENTAL COLITIS BY REGULATING AUTOPHAGY**

Haoming Xu*, Diwen Shou, Yandi Liu, Jiaqi Zhu, Hongli Huang, Chong Zhao, Yao Peng, Youlian Zhou, Huiting Chen, Yuan Zhang, Yongjian Zhou, Yuqiang Nie. *Department of Gastroenterology and Hepatology, Guangzhou Digestive Disease Center, Guangzhou First People's Hospital, School of Medicine, South China University of Technology, China*

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Background Autophagy is an important regulatory process to coordinate the homeostasis of intestinal epithelial cells under stress and mediate pathogen clearance. Fecal microbiota transplantation (FMT) is an important treatment for ulcerative colitis. In this study, we constructed autophagy activated/inhibited dextran sulfate sodium (DSS) induced colitis mice and observed whether FMT improve experimental colitis by regulating autophagy.

Methods Thirty male BALB/c mice were randomly divided into five groups: healthy control group (Control), DSS induced colitis group (DSS), autophagy activated colitis group (DSS+RAPA), autophagy inhibited colitis group (DSS+CQ) and autophagy inhibited and FMT intervention group (DSS+CQ+FMT). 3% DSS drinking water was used to induce colitis, and the following interventions were given daily for seven

days: Control group and DSS group were administered with PBS by gavage and intraperitoneal injection, DSS+RAPA group were administered with PBS by gavage and rapamycin (4mg/kg) by intraperitoneal injection, DSS+CQ group were administered with hydroxychloroquine (40mg/kg) by gavage and PBS by intraperitoneal injection, DSS+CQ+FMT group were administered with hydroxychloroquine (40mg/kg) and PBS by intraperitoneal injection, and eight hours later administered FMT from healthy mice (100μL/10g) by gavage. Disease activity index (DAI) were monitored daily. On the eighth day, colonic tissues were resected after the mice were euthanized. The colon length was recorded, and some tissues were collected for histopathologic evaluation, while some tissues for observing autophagy expression (P62, LC3B and TFEB) by PCR

Results DAI (P=0.0128), colon length (P=0.043), and colon histopathologic score (P=0.0392) of colitis mice were effectively improved by autophagy activation (rapamycin), while DAI (P=0.4178), colon length (P=0.0393) and colon histopathologic score (P=0.765) were worsened markedly by autophagy inhibition (hydroxychloroquine); After autophagy inhibition, the following indexes of colitis were still significantly improved by FMT: DAI (P=0.0205), colon length (P=0.0008) and colon histopathologic score (P=0.0015) (IDDF2021-ABS-0212 Figure 1A. Fecal microbiota transplantation ameliorated experimental colitis and up-regulated autophagy expression, IDDF2021-ABS-0212 Figure 1B. Fecal microbiota transplantation ameliorated experimental colitis and up-regulated autophagy expression, IDDF2021-ABS-0212 Figure 1C. Fecal microbiota transplantation ameliorated experimental colitis and up-regulated autophagy expression, IDDF2021-ABS-0212 Figure 1D. Fecal microbiota transplantation ameliorated experimental colitis and up-regulated autophagy expression), and the expression of the following autophagy genes were changed: P62 was significantly down-regulated (P=0.006), while LC3B and TFEB were significantly increased (P=0.0033; P=0.0039) (IDDF2021-ABS-0212 Figure 1E. Fecal microbiota transplantation ameliorated experimental colitis and up-regulated autophagy expression).

Conclusions Autophagy activation may be one of the mechanisms by which FMT improves DSS induced experimental colitis.

Abstract IDDF2021-ABS-0212 Figure 1

Clinical Hepatology

IDDF2021-ABS-0008

IS FATTY LIVER ASSOCIATED WITH DEPRESSION? A META-ANALYSIS AND SYSTEMATIC REVIEW ON PREVALENCE, RISK FACTORS AND OUTCOMES OF DEPRESSION AND NON-ALCOHOLIC FATTY LIVER DISEASE

¹Cheng Han Ng*, ¹Jieling Xiao, ¹Lincoln Kai En Lim, ¹Darren Jun Hao Tan, ¹Wen Hui Lim, ¹Cyrus Ho, ¹Eunice Xiang Xuan Tan, ²Arun Sanyal, ¹Mark Dinesh Muthiah. ¹Yong Loo Lin School of Medicine, Singapore; ²Virginia Commonwealth University, Richmond, Virginia, USA

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Background Non-alcoholic Fatty Liver Disease (NAFLD) has a high global prevalence and this is projected to increase

further. Similarly, the prevalence of depression is on the rise, along with it is the increase of various comorbidities. While studies exploring the association have been done, there are conflicting data. This meta-analysis and systematic review

Abstract IDDF2021-ABS-0008 Figure 1