

## **DBT-THSTI team seeks to better understand Acute Ulcerative Colitis**

New Delhi, Oct 07: The World IBD Day with the hashtag #ManageYourIBD was observed on 19<sup>th</sup> May, 2020 to promote awareness around Inflammatory Bowel Disease (IBD) across the globe. India, according to the Wellness 365, which is a group of medical professionals, is second (1.5 million) only to the US (1.6 million) in terms of the number of known cases of IBD. IBD is a blanket term used for two conditions – Ulcerative Colitis (UC) and Crohn's Disease (CD) that differ on the basis of the area of the gastrointestinal tract that is affected, and the pattern of inflammation.



A team led by Dr. Bhabatosh Das at Translational Health Science and Technology Institute (DBT-THSTI) studies how microbiome affects health and disease in populations and individuals. Working with Dr. Vineet Ahuja from AIIMS, Delhi, and teams from the School of Life Sciences of Manipal Academy of Higher Education and Translational Gastroenterology Unit of John Radcliffe Hospital at Oxford, they compared the gut microbiomes of patients with Ulcerative Colitis, Acute Severe Colitis (ASC) and healthy controls.

The gut microbiome of patients with ulcerative colitis (UC) has been characterized in earlier studies and this team came together to find out if a distinct microbiome is found in individuals with Acute severe colitis (ASC), which is an extremely severe form of UC, and requires hospitalization and treatment with intravenous corticosteroids.

How would the study be helpful?

Underlying IBD is an interplay of environment, primarily the diet, and gut microbiome in individuals who have genetic susceptibility to the disease. This interplay leads to an aberrant immune response causing tissue destruction and inflammation. Earlier studies show that IBD gut microbiome has lesser diversity, and lesser anti-inflammatory and higher pro-inflammatory bacteria. This knowledge has been applied to build therapies that manipulate the microbiomes to resume a healthy gut.

In their recent study, the team found that the gut microbiome in individuals with ASC had the least diversity when compared to mild-moderate UC individuals or healthy controls. However, since only a small number of individuals could be recruited in this study, the authors recommend that statistically more powerful studies, with larger numbers of individuals recruited in them should be undertaken before an intervention is recommended based on these findings.

Dr. Das's work was funded by DBT.

The complete article can be read at 10.1111/jgh.15232

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