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ORAL PRESENTATIONS

Abstracts

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The "FMT in UC" microbe and host biorepository

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Topic: 8A: Unlocking Health Insights from Donated Human Tissues

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Introduction

Fecal Microbiota Transplantation (FMT) is an efficient therapy for recurrent *Clostridioides difficile* infection, but also holds promise in the treatment of inflammatory bowel disease, like ulcerative colitis (UC) and other complaints. From an ecological perspective, FMT seeks to restore a homeostasis to a disturbed host-microbiome.

Methods

Our translational study group in Graz has gathered huge expertise in the treatment of patients experiencing therapy refractory chronic active UC, an end-stage disease condition, with repeated FMTs. Accompanying this study is a huge biorepository consisting of donor and recipient stools, gut biopsies of patients as well as other biospecimens (e.g. urine, plasma) for omics analyses.

Results

About 1/3 of these patients are experiencing remission of the disease, wherein other therapies are currently failing. Several molecular microbial (e.g. taxa associated with response) and host (e.g. mucosal transcriptome) features were identified which might explain the efficacy of this therapy.

Conclusion

This biorepository is used to investigate the principles governing healing induction in UC via FMT but also use this resource to identify and isolate beneficial microbes out of donor stools which can be exploited as biotherapies (i.e. "modern probiotics") in future.

References:

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