

the PCR process. Once appropriate reagents had been added the PCR tube the constituents were entered into a Roche thermo-cycler 480 to undergo DNA replication. The amplified samples were then seeded at 5µl into a 1.6% agarose gel to undergo electrophoresis.

The trialled samples were refined to a total of 24 that proceeded to be inputted into the University of Liverpool CGR for sequencing. Generated data was analysed using MicrobiomeAnalyst. The data set was refined using a prevalence of 10% and variance filters employing inter-quartile ranges to remove fungal organisms with very low prevalence and reduce the number of sequencing errors. Data was then normalised using total sum scaling.

Results Comparison of the mycobiome of individuals with PD relative to healthy controls have presented an altered fungal composition of the gastro-intestinal tract. 8 OTU-level and 3 order-level specific fungal species have been identified to be differentially abundant by varying statistical tests (figure 1, depicts the relative species abundance change of fungal organisms between PD VS healthy controls)

Conclusion Overall this study provides evidence of alteration to the mycobiome of patients afflicted with PD relative to that of healthy controls. It reinforces data previously presented by the hibernating spore hypothesis on how a fungal organism may be involved in PD pathogenesis, and now paves the way for future studies examining specific fungal species and their possible pathological interaction with both the gastrointestinal system and the CNS.

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ABDOMINAL PAIN IN STUDENTS OF THE MEDICAL UNIVERSITY: RELATIONSHIP WITH NUTRITIONAL HABITS

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Introduction Abdominal pain is one of the symptoms of functional gastrointestinal disorders, which are widespread among young people. Purpose to study the prevalence of the abdominal pain syndrome in association with nutritional habits among students of the medical university.

Methods a survey of 3634 students of the medical university, aged from 17 to 34 years (average age 23.34 ± 6.48 years), was conducted. Among the respondents, there were 709 (19.51%) male and 2925 (80.49%) female individuals. All subjects anonymously completed questionnaires (GSRs, WHO CINDI program questionnaire). Statistical analysis was carried out in the Statistica Stat Soft.

Results the presence of abdominal pain syndrome was detected in 2300 (63.29%) of respondents. 459 (19.96%) of the respondents answered positively to the question: 'Did you feel pain or discomfort in the upper part of the abdomen or in the stomach area last week?'. 714 (31.04%) of the respondents answered positively to the question: 'Did you feel hunger pains last week? (This is a feeling of emptiness in the stomach due to the need to have a snack between meals)'.

1127 (49.0%) of respondents felt both symptoms. Persons with abdominal pain showed significantly more complaints about the presence of other gastrointestinal syndromes such as dyspeptic ($U = 643595.0$, $p < 0.000$), reflux syndrome ($U = 920284.0$, $p < 0.000$) and constipation ($U = 1129323$, 0 , $p < 0.000$). When choosing food products, people with abdominal pain are guided by the possibilities of the family budget ($U = 1454402.5$, $p = 0.000$). They are less interested in quality ($U = 1503088.5$, $p = 0.000$) and the usefulness of food products ($U = 1503619$, 0 , $p = 0.000$), compared to individuals without abdominal pain. Respondents with abdominal pain had the following habits: an increased consumption of coffee and tea ($U = 1544300.5$, $p = 0.0048$ and $U = 1538526.0$, $p = 0.0027$, respectively), low consumption of vegetables and fruits ($U = 1323404.0$, $p = 0.000$ and $U = 1479562.0$, $p = 0.000$, respectively), the habit of oversalting the cooked foods ($2I = 18.85$, $p < 0.001$), various taste preferences for flour-based products ($2I = 13.47$, $p < 0.001$), for fatty products ($2I = 6.92$, $p < 0.001$), for spicy products ($2I = 7.76$, $p < 0.001$), for salty products ($2I = 41.09$, $p < 0.001$), for sweet products ($2I = 25.35$, $p < 0.001$). The frequency of meals did not affect the presence of abdominal pain ($U = 1588756.5$, $p = 0.2845$). However, people with abdominal pain significantly more often reported on a time limit for eating ($2I = 11.93$, $p < 0.001$), frequent overeating ($2I = 57.77$, $p < 0.001$) and irregular meals ($2I = 57.77$, $p < 0.001$).

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POTENTIAL PERILS OF INEFFECTIVE OESOPHAGEAL MOTILITY IN IDIOPATHIC PULMONARY FIBROSIS (IPF)

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Introduction IPF is a chronic, irreversible, and progressive lung disease, with survival from diagnosis of only 2–5 years. It is characterised by excessive extracellular matrix deposition and remodelling within lung tissue, initiated by repetitive alveolar epithelial cell injury. One trigger of injury is believed to be micro-aspiration of gastroesophageal reflux. However, there is limited or no data on objective measures of reflux, and how it relates to oesophageal motility, lung mechanics and pulmonary function. This study used high resolution impedance manometry, 24 hr pH-impedance and pulmonary function testing to address these questions.

Methods A prospective cohort study of 32 patients with IPF (aged 53–75 yr; 25 male) assessed between Dec. 2018 and Dec. 2019 at Mayo Clinic, USA and Leeds Teaching Hospital Trust.

Results Twenty (63%) patients exhibited dysmotility (Chicago Classification v3.0 (CC)); 14(70%) hypo-contraction (eg ineffective oesophageal motility, fragmented peristalsis, occurring in $\geq 50\%$ swallows, and absent contraction) and 6(30%) oesophago-gastric junction outflow obstruction (EGJOO). Abnormal reflux bolus exposure time was identified in 9(28%) patients, in whom 5/9, and one patient with normal reflux, had an abnormal number of events reaching the proximal oesophagus. 30%(13–48%) (median(IQR)) of all events reached the proximal oesophagus. 4/14 patients with hypo-contraction, 5/12 with normal motility and 0/6 with EGJOO (CC) exhibited