Abstract IDDF2021-ABS-0013 Figure 1

Abstract IDDF2021-ABS-0013 Figure 2

Abstract IDDF2021-ABS-0013 Figure 3

Results During the autopsy of rabbits, the presence of serous-fibrinous effusion, characteristic tubercular formations on the peritoneum, polymorphic adhesive process due to the organization of exudate in the abdominal cavity was noted. It was proved in the experiment that all animals developed tuberculous peritonitis with a lesion of the large omentum and serous integuments of internal organs (IDDF2021-ABS-0013 Figure 1. Autopsy the adhesive process and gray tubercles are disseminated on the parietal and visceral peritoneum)(IDDF2021-ABS-0013 Figure 2. Autopsy gray tubercles on the parietal peritoneum). A molecular genetic study of fragments of the omentum and peritoneum revealed the DNA of mycobacterium tuberculosis. Histological examination of the fragments of the peritoneum and the omentum showed an area of caseous necrosis and granuloma-like clusters of macrophages (IDDF2021-ABS-0013 Figure 3), single clusters of acid-resistant mycobacteria were detected when the preparations were stained according to Ziehl-Neelsen.

Conclusions The developed method of modeling tuberculosis peritonitis is close to the real human disease in clinical and morphological manifestations and allows us to study the dynamics and mechanisms of the development of a specific infectious process in the abdominal cavity.

IDDF2021-ABS-0028

MICROBIOLOGIC RISK FACTORS OF RECURRENT CHOLEDOCHOLITHIASIS POST ENDOSCOPIC SPHINCTEROTOMY

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Background Bile microbiome has a profound influence on recurrence in choledocholithiasis patients post endoscopic sphincterotomy (EST), but the key pathogens and their function on the biliary tract remain unclear.

Methods In this study, the next-generation sequencing techniques were applied to investigate the biliary microbial characteristics of the recurrent patient's post EST and analyze the metabolic functions of the key pathogens, in the hope of finding out the risk factors of recurrence post EST.

Results Results revealed the distinct clustering of biliary microbiota in recurrent choledocholithiasis from those without recurrence, and a higher relative abundance of *Fusobacterium* and *Neisseria* with the absence of *Lactobacillus* were observed in the bile of the recurrent patients. Functional analysis showed the changes of the microbiome might lead to worse metabolism of carbohydrate and amino acids and more biosynthesis of glycan and other secondary metabolites in the biliary tract, indicating microbiologic influence on recurrence of choledocholithiasis. And survival analysis found out the presence of *Lactobacillales* in bile might be effective in the prediction of recurrence post EST.

Abstract IDDF2021-ABS-0028 Figure 1

(IDDF2021-ABS-0028 Figure A, IDDF2021-ABS-0028 Figure B, IDDF2021-ABS-0028 Figure C, IDDF2021-ABS-0028 Figure D, IDDF2021-ABS-0028 Figure E, IDDF2021-ABS-0028 Figure F)

Conclusions The result of this study may add evidence to the microbiologic etiology of recurrent cholelithiasis and help to develop new prevention methods to avoid recurrence post EST.

IDDF2021-ABS-0029

GLUCOSE LEVELS DECREASE AFTER PERFORMING ISLAMIC FASTING MODELS BUT NOT ONLY RAMADAN FASTING IN HIGH-FAT-HIGH-FRUCTOSE-INDUCED RATS

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Background High-fat-high-fructose (HFHF) intake contributes to developing type 2 diabetes mellitus (T2DM) as a comorbid. Intermittent fasting in Islam, such as Ramadan fasting (RF), Dawood fasting (DF), and Monday-Thursday fasting (MTF), have been suggested that ameliorate glucose levels. However, there has been no research investigating the effects of DF and MTF on glucose levels. This study investigates the effect of fasting in Islam on glucose level changes in HFHF-induced rats.

Methods Twenty-five 8-week-old male Wistar rats were randomly divided into five groups after acclimatisation for seven days. Group 1 was maintained as standard diet control; Group 2 was maintained as HFHF control diet; Group 3 was treated with RF, which fasted every day; Group 4 treated with DF, which on the 1st day performed fasting (no food and drink), the 2nd day is not performed fasting (free to eat and drink), and the 3rd day is performed fasting again and

repeated so on; Group 5 was treated with MTF which fasted only on Mondays and Thursdays. The treatment group fasted after 14 days of HFHF induced, with a fasting duration of 14 hours (17:00 to 07:00), for 29 days. Glucose measurement is performed after HFHF induction (pre-test) and after fasting treatment (post-test). The data was analysed using paired-samples T-test.

Results After fasting treatment, glucose levels decreased significantly in the Group 3 ($p=0.012$), Group 4 ($p=0.042$), and Group 5 ($p=0.008$) compared to pre-tests. Meanwhile, Group 1 and Group 2 did not show any significant changes in glucose levels ($p>0.05$) (IDDF2021-ABS-0029 Figure 1. Glucose levels).

Conclusions This result suggests a new insight into fasting in Islam, RF, DF, and MTF can be an alternative in lowering high glucose levels caused by HFHF.

Abstract IDDF2021-ABS-0029 Figure 1