Abstract IDDF2021-ABS-0095 Figure 2

Conclusions This meta-analysis and systematic review demonstrate the high prevalence of CAD in pre-LT patients, the associated risk factors and outcomes. More studies are required to determine the optimal screening methodology for CAD in pre-LT patients.

IDDF2021-ABS-0096

SELECTING ANTI-DIABETIC MEDICATIONS FOR TYPE 2 DIABETICS WITH NON-ALCOHOLIC FATTY LIVER DISEASE. EVIDENCE FROM A NETWORK META-ANALYSIS

¹Cheng Han Ng*, ¹Snow Yunni Lin, ¹Yip Han Chin, ¹Ming Hui Lee, ¹Nicholas Syn, ¹Xin Lei Goh, ¹Shao Feng Mok, ¹Eunice Tan, ¹Daniel Huang, ²Nicholas Chew, ¹Chin Ming Khoo, ¹Mark Dinesh Muthiah, ³Shadab Siddiqui. ¹*Yong Loo Lin School of Medicine, Singapore;* ²*Department of Cardiology, National University Hospital, Singapore;* ³*Department of Internal Medicine, Division of Gastroenterology, Hepatology and Nutrition, Virginia Commonwealth University, USA*

10.1136/gutjnl-2021-IDDF.89

Background Non-alcoholic fatty liver disease (NAFLD) is an increasingly common disease, where more than half of diabetic patients may develop NAFLD. Judicious selection of anti-diabetic agents is imperative to reduce mortality. Recent trials

suggest that anti-diabetic drugs have great promise for the treatment of NAFLD. However, the comparative efficacy between individual agents remains unclear.

Methods We systematically searched Medline and Embase for studies on biguanides, sulfonylurea, peroxisome proliferator-activated receptor gamma (PPAR γ) agonists, insulin, sodium-glucose transport protein 2 inhibitors (SGLT2i) and glucagon-like peptide-1 receptor agonists (GLP1-RA) for the treatment of NAFLD in diabetic patients. We conducted a frequentist network meta-analysis with p-score as a surrogate measure of treatment effectiveness.

Results 13 studies were included and the p-score results can be found in IDDF2021-ABS-0096 Table 1. PPAR γ agonists were most efficacious for reducing hepatic steatosis. PPAR γ agonists (MD: -6.02%, CI: -10.37 to -1.67), SGLT2i (MD: -2.60%, CI: -4.87% to -0.33%) and GLP1-RA (MD: -3.50%, CI: -7.39% to 0.39%) were superior to standard of care for reducing hepatic steatosis, although there was no significant difference when comparing GLP1-RA (MD: -0.90, CI: -5.41 to 3.61) and PPAR γ agonists (MD: -3.42, CI: -7.13 to 0.29) versus SGLT2i. SGLT2i was most effective for fibrosis reduction versus PPAR γ agonists (MD: -0.06, CI: -0.10 to -0.02) and standard of care (MD: -0.13, CI: -0.34 to 0.20). GLP1-RA yielded the greatest improvement in ALT and had greater efficacy versus standard of care (MD: -9.41, CI: -19.46 to

Abstract IDDF2021-ABS-0096 Table 1 P-score summary of liver parameters with hypoglycaemic agents in NAFLD diabetes

	MRI-PDFF	FIB-4	AST	ALT	GGT	BMI	TC	TG	LDL	HDL
Biguanide	-	-	0.8305	0.761	0.9976	0.6892	0.4	0.0593	0.5486	0.307
GLP1-RA	0.7	-	0.821	0.8434	0.8251	0.8395	0.232	0.4632	0.2231	0.5032
PPAR γ agonists	0.9372	0.3487	0.4669	0.6321	0.5375	0.0039	0.4871	0.5921	0.5121	0.7414
SGLT2i	0.5784	0.914	0.4513	0.6987	0.3908	0.8764	0.7739	0.6204	0.8281	0.8394
Insulin Glargine	0.063	-	0.386	0.2119	0.5282	0.3097	0.0199	0.5686	0.0094	0.5645
Standard of Care	0.2214	0.2372	0.2352	0.2042	0.2052	0.5192	0.8769	0.6384	0.7828	0.4695
Sulfonylurea	-	-	0.309	0.1487	0.0155	0.2621	0.7102	0.558	0.5959	0.075

PPAR γ – Peroxisome proliferator-activated receptor gamma, SGLT2i – Sodium-glucose co-transporter-2 inhibitors; GLP-RA – glucagon-like peptide-1 receptor agonists; AST – aspartate aminotransferase; ALT – alanine aminotransferase; GGT – Gamma-glutamyl transferase; MRI-PDFF – magnetic resonance imaging derived proton density fat fraction; Fibrosis-4 – FIB4; BMI – Body Mass Index; TC – Total Cholesterol; TG – Triglycerides; LDL – Low density lipoprotein; HDL – high density lipoprotein

0.64) and sulfonylurea (MD: -14.21, CI: -22.86 to -5.56). SGLT2i showed the greatest reduction in BMI, being superior to sulfonylurea (MD: -1.67, CI: -3.09 to -0.25) and standard of care (MD: 3.45, CI: 1.24 to 5.66). SGLT2i showed the greatest reduction of LDL and TG and the greatest increase of HDL.

Conclusions SGLT2i, GLP-1RA and PPAR γ agonists are viable choices for the management of NAFLD in diabetic patients. SGLT2i was found to be most efficacious for fibrosis and BMI reduction, GLP-1RA for steatosis reduction and PPAR γ agonists for lipid modulation and should be considered over sulfonylurea for second-line therapy.

IDDF2021-ABS-0102

RETROSPECTIVE ANALYSIS OF CHARACTERISTICS, INDICATIONS AND OUTCOMES OF ERCP IN A TERTIARY REFERRAL CENTER OF SAUDI ARABIA

¹Laeque Ahmed*, ²Ahmed Basalim, ³Nawaf Alwagdan, ²Bsaim Altirkistani, ⁴Ziyad Albassam, ⁵Mohammed Almatrafi, ³Faisal Alrubaei, ¹Adnan Alzanbagi. *¹King Abdullah Medical City Makkah, Saudi Arabia; ²King Saud Bin Abdul Aziz University, Jeddah, Saudi Arabia; ³College of Medicine, Taif University, Taif, Saudi Arabia; ⁴King Abdul Aziz University, Jeddah, Saudi Arabia; ⁵Umm Al Qura University, Makkah, Saudi Arabia*

10.1136/gutjnl-2021-IDDF.90

Background Endoscopic Retrograde Cholangiopancreatography (ERCP) is an advanced endoscopic procedure that is an essential tool in the management of pancreaticobiliary diseases. In the Arab world, there is limited data available on the indications and outcomes of ERCP. Therefore, we aimed to report the characteristics of patients, indications, and outcomes of ERCP from a tertiary referral center in Saudi Arabia.

Methods We retrospectively looked at ERCP procedures done at a tertiary referral center covering the western region of Saudi Arabia from August 2018 till July 2020. Data were collected from the hospital's electronic patient record and endoscopy database.

Results Of 1001 ERCP's performed, full data was available on 712 procedures on 581 patients that were included in the final analysis. Mean age was 53.1. 404 (56.7%) were female. All ERCPs were performed by certified consultants, with therapeutic intention. Sphincterotomy was performed in 563/581 (96.9%) patients who underwent first-ever ERCP. The commonest indication of ERCP was confirmed or suspected choledocholithiasis (52.6%), followed by replacement or removal of a biliary stent (15.7%), 55 (7.7%) for suspected ascending cholangitis, 54 (7.5%) for severe acute biliary pancreatitis, and 15 (2%) for suspected sphincter of Oddi dysfunction. The commonest finding among all patients was choledocholithiasis in 57.9%, debris in 15.2%, and biliary stricture in 14.8%. The commonest complication was pancreatitis 22/712 (3.1%) followed by post-sphincterotomy bleeding 16/712 (2.2%) and perforation 9/712 (1.2). Bleeding was controlled by endoscopic intervention in 4/16 (25%) and 1/16 (6.2%) patient underwent surgery. 2/712 (0.28%) patients had procedure-related mortality, one secondary to post-procedure pulmonary embolism and the other because of complicated perforation. The deeper CBD cannulation rate was 98.2% (570/581).

Conclusions Our study results revealed that ERCP performed in Saudi Arabia has similar indications and findings as compared to international literature. ERCP is successful in achieving the therapeutic objective with complication rates consistent with published literature.

IDDF2021-ABS-0112

SAFETY OF CONTINUING ANTICOAGULATION DURING ENDOSCOPIC VARICEAL LIGATION IN CIRRHOSIS PATIENTS: A SYSTEMATIC REVIEW AND META-ANALYSIS

¹Wei Xuan Tay*, ¹Gerald Low Jun Teck, ¹Jing Hong Loo, ¹Le Shaun Ang, ²Yu Jun Wong. *¹Yong Loo Lin School of Medicine, National University of Singapore, Singapore; ²Changi General Hospital, Singapore*

10.1136/gutjnl-2021-IDDF.91

Background Endoscopic variceal ligation (EVL) is a common procedure for primary and secondary prevention of variceal bleeding in cirrhosis patients. As portal vein thrombosis is associated with a higher risk of variceal bleeding and decompensation in cirrhosis patients, anticoagulation may be considered in these patients. However, it is uncertain if continuing anticoagulation during EVL may significantly increase the risk of bleeding. To address this gap, we performed a systematic review and meta-analysis to evaluate the safety of continuing anticoagulation during EVL. The primary outcome was the bleeding risk following EVL. Secondary outcomes were mortality following EVL and length of stay (LOS).

Methods We performed a systematic search of 4 electronic databases (PubMed/MEDLINE, EMBASE, Cochrane library, and ClinicalTrials.gov) up to May 21, 2021 using both free text and MeSH terms. We included all studies that reported the 4-week rebleeding rate in cirrhosis patients during EVL, regardless of study design, language, publication types or status. The pooled relative risk (RR), mean difference (MD) and 95% confidence interval (95%CI) of study outcomes were estimated using Review Manager in a random-effect model.

Results A total of six studies (5,102 subjects, 1,028 received anticoagulation) fulfilled our inclusion criteria. The mean (standard deviation) MELD and Child-Pugh score were 18 (5.5) and 7 (1.6), respectively. Follow-up duration ranged from 6 to 196 weeks. The overall pooled risk of bleeding and mortality was 8.2% (95%CI: 6.6%-10.0%) and 8.6% (95%CI: 4.2%-15.3%), respectively. Mean number of bands deployed per session was similar between the anticoagulation and control group. Continuation of anticoagulants during EVL was not associated with a higher pooled risk of bleeding (RR: 0.90, 95%CI: 0.71-1.15, $I^2 = 0\%$) and mortality (RR: 1.16, 95%CI: 0.22-6.19) following EVL. However, continuing anticoagulation was associated with a shorter LOS (3.9 days, 95% CI: -7.35 to -0.48 days, $I^2 = 0\%$). All studies had a low risk of bias except for one.

Conclusions In cirrhosis patients undergoing EVL, continuing anticoagulation was safe without a significant increase in bleeding and mortality.

IDDF2021-ABS-0116

SURGICAL TREATMENT FOR NON-COLORECTAL NON-NEUROENDOCRINE LIVER METASTASES: A SYSTEMATIC REVIEW AND META-ANALYSIS

Kelvin Ng*, Nicole Cheng, Hon-Ting Lok, Charing Chong, John Wong, Kit-Fai Lee. *The Chinese University of Hong Kong, Hong Kong*

10.1136/gutjnl-2021-IDDF.92

Background Liver-only metastasis from primary tumor elsewhere is common. Hepatectomy for colorectal or neuroendocrine liver metastases have favourable survival outcomes and