candidate circRNA was performed in vitro and in vivo, including cell viability assay, colony formation assay, cell cycle analysis, apoptosis array and Matrigel migration and invasion assay. Differences between experimental groups and control groups were analysed using the paired t-test and Wilcoxon test.

Results Of the seven-candidate circRNAs, Circ5379-6 was verified to be correlated positively to PPARα. Overexpression of Circ5379-6 lead to up-regulation of PPARα and it thereby suppressed the cell proliferation, inhibited the cell migration and invasion. The most obvious effect of Circ5379-6 expression should be the induction of cell apoptosis in the HCC cell lines. Matrix metalloprotein 9 (MMP-9) was down-regulated expressed while Vimentin, N-Cadherin and E-Cadherin were up-regulated expressed in the tumour generated by the cells with Circ5379-6 overexpression. Furthermore, the overexpression of Circ5379-6 effectively inhibited the tumorigenesis and metastasis of HCC according to the in vivo studies in nude mice.

Conclusions Circ5379-6 acts as an effective tumour inhibitor of HCC via regulating the level of PPARα. It suggests that induction of Circ5379-6 expression may utilise as a potential therapeutic method for HCC.

Background Non-alcoholic fatty liver disease (NAFLD) is considered as the hepatic manifestation of metabolic syndrome and is characterised by the accumulation of lipid droplets. Pokemon (FBI-1/ZATB7A) is an important proto-oncogene which is involved in cancer development and adipogenic gene expression. The aim of our study is to explore the role of Pokemon in the development and progression of NAFLD.

Methods C57BL/6 mice were fed with normal chow (NC) or high-fat diet (HFD) for 16 weeks to induce NAFLD. Pokemon mRNA and protein were detected by RT-PCR and Western blot as well as immunohistochemistry. NAFLD cell models were established by oleic acid, and si-Pokemon hepatic cancer cell lines were also constructed by plko lentiviral system. NAFLD cell models were established by oleic acid, and si-Pokemon hepatic cancer cell lines. Matrix metalloprotein 9 (MMP-9) was down-regulated expressed while Vimentin, N-Cadherin and E-Cadherin were up-regulated expressed in the tumour generated by the cells with Circ5379-6 overexpression. Furthermore, the overexpression of Circ5379-6 effectively inhibited the tumorigenesis and metastasis of HCC according to the in vivo studies in nude mice.

Conclusions Circ5379-6 acts as an effective tumour inhibitor of HCC via regulating the level of PPARα. It suggests that induction of Circ5379-6 expression may utilise as a potential therapeutic method for HCC.

Background Diabetes has been considered as one of the fastest growing epidemic worldwide; the number of people with diabetes is estimated to increase from 381.8 million in 2013 to 591.9 million in 2030. Oxidative stress in diabetic tissues is accompanied by high level of free radicals and the simultaneously declined antioxidant enzymes status leading to cell membrane damage. In the present study, the effect of sodium orthovanadate (SOV) and Trigonella foenum graecum seed powder (TSP) administration has been studied on blood glucose and insulin levels, antioxidant enzymes, lipid peroxidation, lipofuscin and DNA degradation, distribution of glucose transporter (glut 2, glut4) in liver tissues of the alloxan-induced diabetic rats and to see whether the treatment with SOV and TSP is capable of reversing these effects.

Materials and methods Diabetes was induced by administration of alloxan monohydrate (15 mg/100 gm b.wt.) and rats were treated with 2IU insulin, 0.6 mg/ml SOV, 5% TSP in the diet and a combination of 0.2 mg/ml SOV with 5% TSP separately for 21 days. Control animals were given only the vehicle.

Results Diabetic rats showed hyperglycaemia with almost fourfold high blood glucose levels. Hyperglycaemia increases lipid peroxidation and DNA degradation, causing decreased activities of membrane-bound ATPases, antioxidant enzymes and glucose transporter expression with diabetes in the rat liver. Rats treated with a combined dose of SOV and TSP had glucose levels comparable to controls, similar results were obtained with the activities of antioxidant enzymes, membrane-bound ATPases, antioxidant enzymes and glucose transporter expression with diabetes in the rat liver. Rats treated with a combined dose of SOV and TSP had glucose levels comparable to controls, similar results were obtained with the activities of antioxidant enzymes, membrane-bound ATPases, antioxidant enzymes and glucose transporter expression with diabetes in the rat liver.
monitor of the intersection(s) of nephrology data in relation to CKD via wearable technology (MI band and Yu band). To study effects of daily life routine activities on data by a wearable device that can obtain real-time CKD data, help technologists understand medical aspects, and clinicians to understand technological processes them and provide assistance based on pre-determined specifications in CKD patients in New Delhi, India.

Methods Total of 78 CKD patients were taken as a subject with an equal ratio of male and female at university college of medical sciences, New Delhi, India. Wearable monitoring devices were put on the wrist of CKD patients for 30 days, and a questionnaire was filled out by each patient. Both diabetes and cardiovascular disease, in turn, are known as important factors for developing CKD and aggravation toward once end-stage renal disease. In all subjects, blood glucose was measured on daily basis with day to day data of their monitoring of step count, blood pressure, calorie burnt, insulin dose, motion time i.e. every time when your body was in motion, sleep monitoring (deep sleep, light sleep, wake up time), monitoring heart rate, cardiac arrhythmias to know daily routines and recording them for health purpose.

Results Present results showed that both wearable device readings showed there was a normal heart rate, more calorie burnt with better control of sugar control and average good sleep count in more physically workout, include walking in stroke patients compared to less physically workout CKD patients, identified by professional physiotherapists. Both device readings showed that after changing lifestyle routine among less physically active CKD patients, their post-CKD events normalise.

Conclusions With this study we show that, by using, these wearable devices ensured online assistive feedback for CKD patients is possible with their health awareness, exercising and motivate further studies.

Clinical Gastroenterology

**IDDF2018-ABS-0001**

**FOREIGN BODY INGESTION: 4 CASES WITH DIFFERENT MANAGEMENT APPROACH**


10.1136/gutjnl-2018-IDDFabstracts.57

Background We managed four cases of ingested foreign bodies located in oesophagus and stomach differently. There are specific guidelines for the management of FB ingested in paediatrics age group depending upon type, size, symptoms and location in the digestive tract.

Methods Our first two cases were of ingested button battery which is blunt or non-sharp type contain corrosives, small in size (<2 cm diameter) and were impacted in the oesophagus, both the patients presented to us late by day 4 and 5. Both presented with symptoms of a cough, dysphagia, vomiting and respiratory distress later diagnosed tracheoesophageal fistula and needed surgical correction. Our third case was a 5 years old patient who had ingested a coin, which is blunt in type, was exactly 2 cm in diameter and was located in the stomach. As per guidelines he was followed serially for location by X-ray and symptoms but was later removed endoscopically, as coin had not passed the stomach outlet by the 4th week and had a risk of mucosal injury, although the patient was asymptomatic. Our fourth case had ingested small blunt plastic toy part which was initially impacted in oesophagus before referred to us. FB was tried to be removed endoscopically from oesophagus as soon as diagnosed with X-ray but was pushed down to the stomach during the procedure. In this case, the patient was further observed by us since the FB reached the stomach which was later found passed spontaneously in stool on day 6 after endoscopic failure.