The Kaplan-Meier method, log-rank test and Cox proportional hazards model were used to estimate the cumulative incidence of clinical disability and perform univariate analysis and multivariate analysis, respectively.

**Results** 143 (44.8%) out of the 319 CD patients (median follow-up time 37.2 months, interquartile range: 22.7–57.6 months) progressed to clinical disability, and 51 (16.0%) suffered disability recurrence. Additionally, the cumulative rates of disabling CD were 18.8%, 40.1%, 55.5%, 85.6% at 1, 3, 5, 10 years after diagnosis respectively [figure 1]. All disabling events, except adverse steroid event (p=0.143), were significantly fewer (p=0.018) in MH patients than those without MH. Multivariable analysis revealed the independent protective factor for the occurrence of disability was MH before disability (HR:0.197; 95% CI: 0.120–0.325), while penetrating (B3) disease behaviour (HR:2.045; 95% CI: 1.283–3.259) and ileocolonic (L3) disease location (HR:1.827; 95% CI: 1.251–2.667) at diagnosis were independent risk factors. Furthermore, in disabling CD patients, achieving MH before the first disabling event could prevent recurrence of disability independently (HR:0.251; 95% CI: 0.077–0.823).

**Conclusions** Clinical disability of CD was common and increasing during the follow-up in China. B3 and L3 at diagnosis were predictive risk factors of clinical disability, whereas MH significantly reduced the occurrence and recurrence of disability in CD.

![Abstract IDDF2018-ABS-0246 Figure 1](Image)

**Abstract IDDF2018-ABS-0246** Efficacy of a Novel Disposable Sheathed Gastroscopic System in Endoscopic Therapy

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**Background** Endoscopic examination and therapy carry a potential risk of cross-infection, and the traditional reprocessing method is time-consuming. Here we reported a novel disposable sheathed gastroscope system and evaluated its efficacy in endoscopic therapy.

**Methods** The disposable sheathed gastroscope system used in this study consisted of a disposable sheath and a common video gastroscope, which were both provided by Shenda Endoscope Co., Ltd., Shenyang, China. The sterilised disposable sheath covered the outer surface of the gastroendoscope. An outlaid disposable air-water pipe (still covered by the sheath) and a miniature pump instead of the gastroscopic air-water channel were used for sending air and water. A flexible pipe, with one end tightly connected to the distal tip of covering film, was inserted into the gastroscopic suction-biopsy channel and joined to a three-way cap. This pipe was used as the disposable suction-biopsy channel. After examination and therapy, the contaminated sheath, including pipes and valves, was taken off and a new sheath was put on. Using this sheathed gastroscope system, 78 patients with gastric hyperplastic polyps underwent endoscopic mucosal resection in Beijing Military General Hospital. As a control, 76 patients with similar polyps underwent endoscopic resection with a conventional gastroscope. The time duration of the endoscopic procedure and reprocessing were measured.

**Results** All 154 procedures were completed by using each gastroscopic system. No complications were seen during or after the procedures. The endoscopists who performed the procedures felt the sheath did not affect the operation at all, and all endoscopists had no preference for sheathed versus conventional gastrosopes in endoscopic procedures. The mean procedural time was slightly longer in the Sheathed Group than in the Conventional Group (8.9±2.2 vs. 8.1±1.5 mins, p=0.000). However, the duration of endoscopic reprocessing was much shorter (4.9±0.2 vs. 35±0.2 mins, p=0.000). No microbial contamination was detected in each gastroscope after procedures.

**Conclusions** The novel disposable sheathed gastroscope should be suitable for endoscopic therapy.

**Abstract IDDF2018-ABS-0250** Determinants of Depression and its Impact on Quality of Life in Patients with Chronic Pancreatitis

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10.1136/gutjnl-2018-IDDFabstracts.173

**Background** Endoscopic examination and therapy carry a potential risk of cross-infection, and the traditional reprocessing method is time-consuming. Here we reported a novel disposable sheathed gastroscope system and evaluated its efficacy in endoscopic therapy.

**Methods** The disposable sheathed gastroscope system used in this study consisted of a disposable sheath and a common video gastroscope, which were both provided by Shenda Endoscope Co., Ltd., Shenyang, China. The sterilised disposable sheath covered the outer surface of the gastroendoscope. An outlaid disposable air-water pipe (still covered by the sheath) and a miniature pump instead of the gastroscopic air-water channel were used for sending air and water. A flexible pipe, with one end tightly connected to the distal tip of covering film, was inserted into the gastroscopic suction-biopsy channel and joined to a three-way cap. This pipe was used as the disposable suction-biopsy channel. After examination and therapy, the contaminated sheath, including pipes and valves, was taken off and a new sheath was put on. Using this sheathed gastroscope system, 78 patients with gastric hyperplastic polyps underwent endoscopic mucosal resection in Beijing Military General Hospital. As a control, 76 patients with similar polyps underwent endoscopic resection with a conventional gastroscope. The time duration of the endoscopic procedure and reprocessing were measured.

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**Conclusions** The novel disposable sheathed gastroscope should be suitable for endoscopic therapy.

**Abstracts**
ANOVA/Kruskal-Wallis, chi-square test and Pearson coefficient were used as appropriate. Logistic regression was used to identify independent associations with depression. Principal component analysis (PCA) with biplot and hierarchical cluster analysis (Euclidean distance) were done to evaluate the relationship of depression categories with QOL.

A Bonferroni corrected two-tailed ’p’ value of <0.025 was considered statistically significant.

Results 224 patients were screened of which 208 were included. 151 (72.6%) were males, and the most common aetiology was –idiopathic (150 [72.1%]). Depression was seen in 125 (60.1%) patients (figure 1a). Frequencies of depression categories are depicted in IDDF2018-ABS-0250 figure 1b. There was a significant positive correlation between depression score with a number of pain episodes (r=0.464; p=0.02).

Socio-economic status and continuous pain were independently associated with depression (p<0.0001 and 0.02 respectively).

PCA demonstrated clustering of patients with and without depression. Biplot vectors showed the strongest negative correlation of the depression grades with global health (p<0.0001), role function (p=0.013), physical function (p=0.009), emotional function (p=0.004) and cognitive function (p=0.017), while strongest positive correlation with fatigue (p=0.001) and insomnia (p=0.004) in the QORTC QLQ-30 (figure 2a). Clustering of the different categories of depression in the context of QOL domains was confirmed by the hierarchical clustering (Cophen. coeff. 0.719) (figure 2b).

Conclusions Continuous pain and socioeconomic status independently determine the development of depression in CP. Depression adversely impacts the global, functional, emotional and cognitive components of the QOL.

Abstract IDDF2018-ABS-0250 Figure 1 a, b

Abstract IDDF2018-ABS-0250 Figure 2 a, b

Abstract IDDF2018-ABS-0251 DUCTAL CLEARANCE OF CALCULI DELAYS THE DEVELOPMENT OF DIABETES IN PATIENTS WITH IDIOPATHIC CHRONIC PANCREATITIS

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Background In this study, we evaluate the effect of pancreatic ductal clearance on its development in chronic pancreatitis (CP).

Methods Consecutive patients visiting the Pancreas Clinic between 1st Aug, 2011–31st Jul, 2012 were enrolled. Data on demography/disease progression/morphology (imaging)/treatment were recorded after verifying available documents. Thereafter patients were prospectively followed 6-mthly till June 2017. Patients who couldn’t return were interviewed telephonically. Patients without complete data and those who lost to follow-up were excluded. Prospective data till June 2017 is presented.

Chi-square test was performed for categorical variables; Student’s ‘t’ or the Mann Whitney U test was conducted for continuous variables. Binary logistic regression was performed to identify disease-related factors that imparted independent risk of development of diabetes. Kaplan-Meier survival analysis was used to compare the diabetes-free interval since onset of CP symptoms, and Cox-proportional hazards model to calculate the hazard ratio (HR) (95% confidence interval[Ci]). Two-tailed ‘p’ value of <0.05 was considered statistically significant.

Results 644 patients were enrolled, of which 137 were excluded. Of the 507 analysed patients, 312 (61.5%) had

Abstract IDDF2018-ABS-0251 Figure 1 Kaplan Meier curve showing the development of diabetes