Introduction of Rectal Diclofenac for the Prevention of Pancreatitis in High-risk Patients Undergoing ERCP
Hui YT, Sze SF, Chan YY, Yuen PK, Lam TW
Department of Medicine, QEH

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Introduction
Pancreatitis is the most common serious complication of endoscopic retrograde cholangiopancreatography (ERCP) with an average reported rates of 5%. The risk may increase to 20 - 40% in high-risk cases. Recently, rectally administered non-steroidal anti-inflammatory drug (NSAID) during or immediately after ERCP has been shown to reduce the risk of post-ERCP pancreatitis in high-risk patients.

Objectives
Since September 2013, our Medical GI Team started to use rectal diclofenac to prevent such potentially life-threatening complication. We aim to review the clinical outcome of these patients.

Methodology
We performed an internal audit about the use of rectal diclofenac and the risk of post-ERCP pancreatitis since the introduction of this prophylactic measure. The baseline demographic data, clinical outcome and length of hospital stay, were compared between the high-risk and average-risk groups.

Result
From September 2013 to October 2015, a total of 263 ERCP were performed by Department of Medicine, QEH (mean age 75.9 (SD 13.5), 60.8% male). Rectal diclofenac (100mg suppositories) were given to 53 high-risk patients (20.2%) during or after ERCP. The high-risk indications for post-ERCP pancreatitis include (1) more than 8 cannulation attempts in 35 patients (13.3%); (2) more than 2 of these minor criteria (< 50 years old & female, history of >1 episodes of acute pancreatitis, ≥ 3 pancreatic duct injection with 1 injection to pancreatic tail, pancreatic acinarization, brushing of pancreatic duct) in 10 patients (3.8%); (3) precut papillotomy in 4 patients (2.3%); (4) endoscopic balloon sphincteroplasty of intact papilla in 2 patients (0.8%); (5) history of post-ERCP pancreatitis in 1 patient (0.4%). The risk of post-ERCP pancreatitis were (1) overall risk, 4.2% (11 out of 263); (2) high-risk patients who received rectal diclofenac, 3.8% (2 out of 53); (3) average-risk patients, 4.3% (9 out of 210). The two patients who received rectal diclofenac developed mild (1 patient) and
moderate (1 patient) pancreatitis only. None of them had severe pancreatitis. There is no statistically significant difference in the rate of post-ERCP pancreatitis (P=1.000), severity of pancreatitis (P=0.966) and length of hospital stay (P=0.072) between those have or have not received rectal diclofenac. No NSAID-related adverse events were noted in all patients who received the medication. Conclusions: The use of rectal diclofenac is a safe and effective prophylactic measures in reducing the risk of post-ERCP pancreatitis among high-risk patient.