

## **CASE : 39 year-old Male patient presented with abdominal distension**

Soo Yong Lee, MD

Department of Internal medicine, division of cardiology

Pusan National University Yangsan hospital, Yangsan, Korea

A 39-year-old known chronic heart failure male patient presented with epigastric distension and peripheral edema. There was no congestion on chest X-ray but brain natriuretic peptide (BNP) level was elevated from 522 to 936 pg/mL, total bilirubin was 2.1mg/dL, he complaint epigastric distension after every meal.

He had underlying chronic hepatitis B, biventricular failure (LVEF 29%) and atrial fibrillation. 2 years ago, he had been received Implantable Cardioverter Defibrillator (ICD) implantation for ventricular tachycardia on 24 hour Holter monitoring. Intra-cardiac cardioversion was tried but failed. 1 year after then, complete AV block was noticed, and he came to be fully dependent on pacemaker rhythm. Guideline oriented optimal medication had been administered since first presentation.

Since 3 months ago, he became somewhat resistant to diuretics. Now his diuretics dosage was up- titrated 3 times as before but we could only get minimal improvement of symptom with much deterioration of the renal function. The Echocardiographic findings at that time suggested newly developed resting pulmonary hypertension with mildly elevated right ventricular systolic pressure (RVSP). Follow-up Echo seemed similar to previous study, but we could find slightly increased tricuspid regurgitant (TR) flow which had developed after ICD lead implantation. The prominent hepatic reversal flow suggested the TR was not benign. We could diagnose him as ICD lead-induced severe TR case.

2months after beating heart minimally-invasive tricuspid ringed-annuloplasty with lead reposition, his diuretics requirement reduced almost by 60%.