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Percutaneous endoscopic necrosectomy using a full covered SEMS in an infected necrotizing pancreatitis

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Disclosure statement

I have no actual or potential conflict of interest in relation

to this presentation

Background and Aim

- Revised Atlanta Classification (2012),
  - acute necrotic collections may either resolve spontaneously or become encapsulated, forming a walled-off necrosis (WON), which can be complicated with infection, fistular formation and death.
- Recently, minimally invasive necrosectomy by either percutaneous or endoscopic approach has advocated as the favorable treatment of symptomatic WON.
- Stent-assisted percutaneous endoscopic necrosectomy is a promising technique for necrosectomy.

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Methods

- A 39-year-old men with abdominal pain presented with peripancreatic necrosis 4 weeks after the onset of severe necrotizing pancreatitis.

- Using the flexible endoscope, we deployed a fully covered self-expanding metal stent (FCSEMS) to provide access route for repeated endoscopic necrosectomy.

- Procedures
  - PCD was placed at the perigutter area
  - FCSEMS (20mm x 12cm, Taewoong, Seoul, Korea) was placed across the gastric wall
  - Conventional upper endoscopy was introduced into the necrotic space
  - Extraction of necrotic material using basket, snare and alligator forceps was performed
  - Repeated procedures (4-5 times) and irrigations

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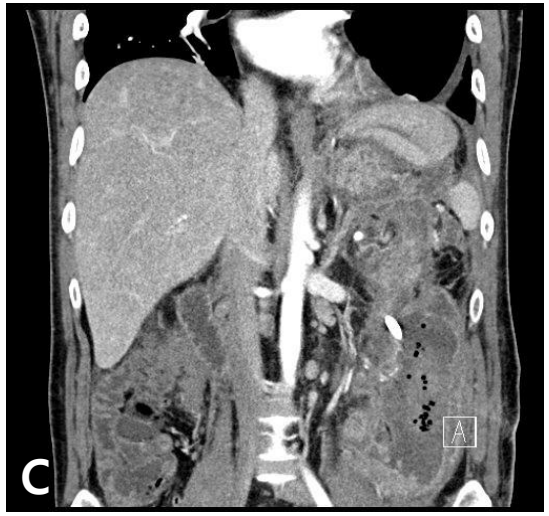
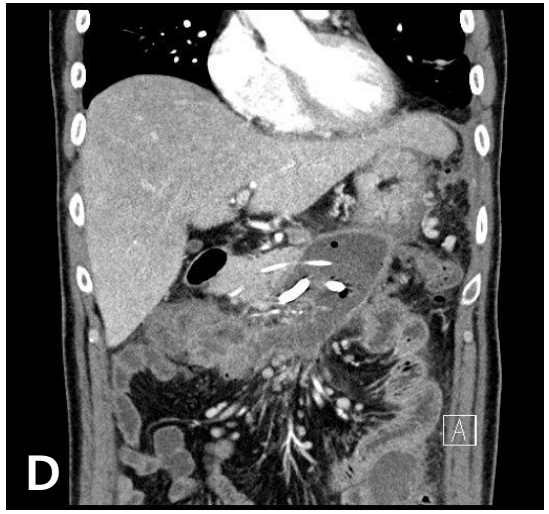
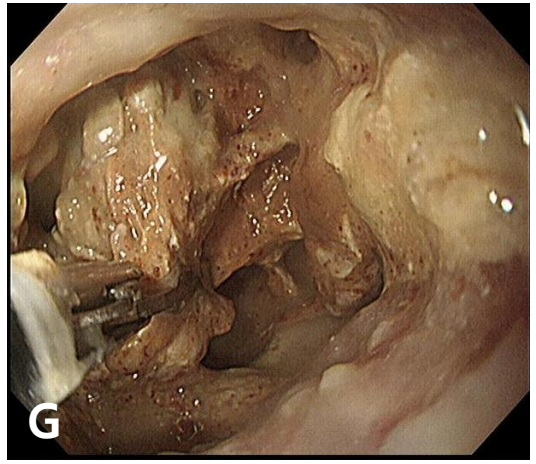
Percutaneous endoscopic necrosectomy using FCSEMS (1)

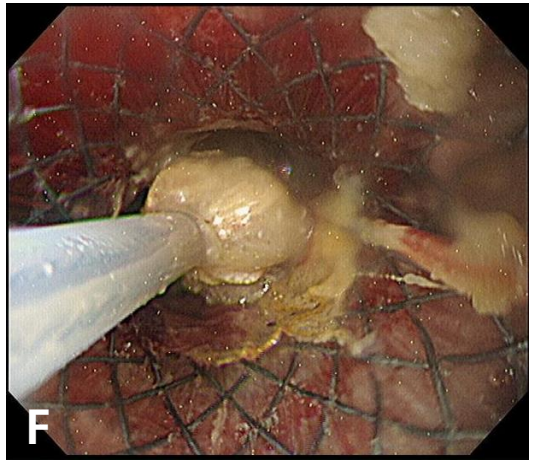
(A,B) Initial CT shows acute necrotic collection at the pancreatic body/tail, extending to the left pericolic area





(C,D) 4wks later, air bubbles in the cavity, indicating WON. PCN catheter was placed.

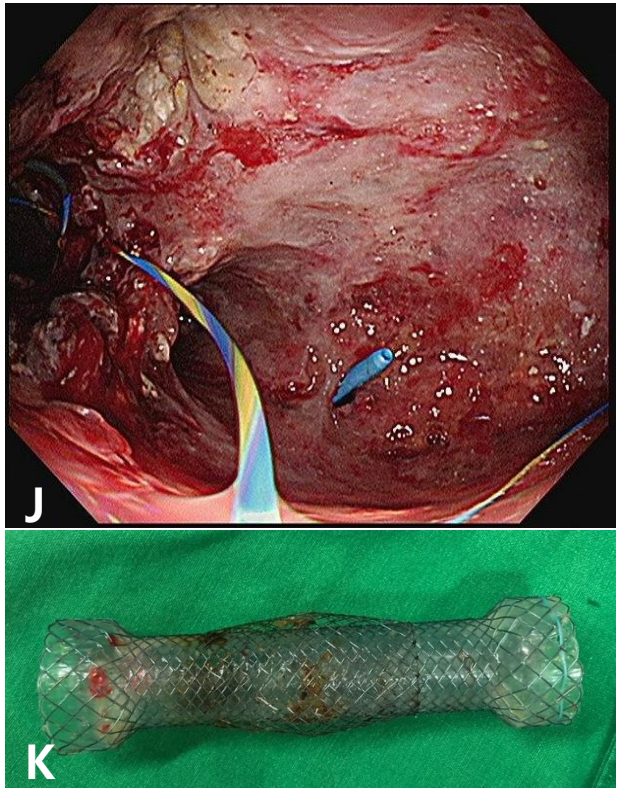




(E) FCSEM insertion through the abdominal wall with drainage catheter inside the stent (F,G) Necrotic material extraction using forcep and snare. (D) Variable sized necrotic materials are extracted.

Percutaneous endoscopic necrosectomy using FCSEMS (2)

(I) Flexible upper endoscopy was advanced through the metal stent (FCSEMS) upto the peripancreatic space



(J) Following the massive extraction of necrotic material, a inner lumen of cavity with a pancreatic stent in the center are obviously visualized.

(K) FCSEMS (20mmx8cm) was easily removed from the gastric wall without any complications.

(L) Finally, follow-up CT showed the dramatic shrinkage of the size of necrotic cavity.

Results

- Necrotic material was successfully extracted using percutaneous endoscopic necrosectomy via FCSEMS.
- No procedure-related complications occurred.
  - No air embolism
  - No bleeding
  - Easy removal of SEMS

Conclusion

- Percutaneous endoscopic necrosectomy via FCSEMS
  - with the flexibility of access route and with the use of a flexible endoscope,
  - is an effective and safe modality in WON patients.