中文題目:一個 MRSA 感染性胰臟偽囊腫的案例報告

英文題目: A case of MRSA infected pancreatic pseudocyst

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Introduction

Pancreatic pseudocyst is a common complication of pancreatitis. Invasive drainage procedures were indicated in patients with uncontrollable symptoms or the presence of complications (infection, gastric outlet or biliary obstruction, bleeding). According to previous study, the culture results of peri-pancreatic fluid collections, such as pseudocyst or necrosis, usually showed that polymicrobial growth instead of monomicrobial pathogen. The most frequently yielded organisms were enterococcus species, followed by candida species, and streptococcus species. Herein, we report a case of pseudocyst with methicillin-resistant staphylococcus aureus (MRSA) infection.

Case Presentation

A 50 year-old man with alcoholic liver cirrhosis had a past history of recurrent pancreatitis. He just discharged from another hospital due to an acute pancreatitis episode. He presented to our hospital due to epigastralgia for 3 days. Associated with poor appetite and abdominal fullness. Initial blood test showed leukocytosis (white blood cell count is 14530/uL, with 77 percent neutrophils) with elevated C-reactive protein level:164mg/L, increased lipase level (138U/L) and amylase (190U/L), and indirect hyperbilirubinemia (Bilirubin total/direct:3.12/1.28mg/dL). Under impression of recurrent pancreatitis, admission was arranged. Paracentesis for ascites analysis and symptoms relief several times during following days, and ascites analysis showed transudative with high amylase level (959U/L) and high cell counts with neutrophil predominance (1700/64%), favoring pancreatitis related. Abdominal computed tomography (CT) revealed increased size of pseudocyst lesion and with pancreatic duct dilatation(Figure.1,2). Further Endoscopic retrograde cholangiopancreatography (ERCP) with pancreatic stent (Fr.7 x 9cm) and endoscopic retrograde biliary drainage (ERBD) (Fr.7 x 10 cm) were done. Afterwards, new onset of abdominal pain was complained. Follow-up CT demonstrated enlarged pseudocyst over retroperitoneal space up to 12cm. (Figure.3). Pigtail catheter for pseudocyst drainage was done and the cystic fluid culture result yielded MRSA (Figure.4) and Enterobacter cloacae ssp cloacae. Vancomycin was added accordingly. Under successful therapy by antibiotics and drainage, the pigtail tube was removed later and the patient was finally discharged.



Figure 1. Complex cystic lesions in the pancreatic tail, suspect pseudocyst

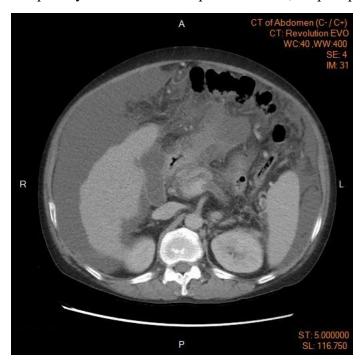


Figure 2. Pancreatic duct dilatation

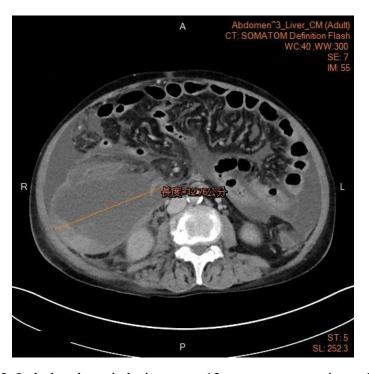


Figure 3. Lobulated cystic lesion up to 12cm over retroperitoneal space

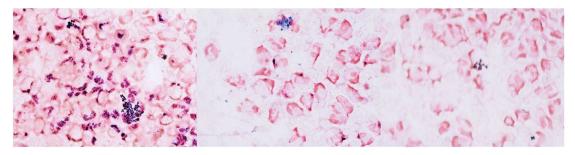


Figure 4. GPC in cluster, MRSA

Discussion

MRSA is a relatively rare pathogen of pancreatic pseudocyst infection. According to a previous case report, one reason may be that MRSA easily passes through the barrier of the stomach during procedure of ERCP and may infect the small intestine, biliary tract and pancreatic duct. However, the possibility of sample contamination may be considered as well. In our case, another hypothesis may attribute to predisposing procedure (pancreatic stent or ERBD).

Conclusion

Infected psuedocyst is a noteworthy complication of pancreatitis. MRSA is a possible pathogen. Clinicians should keep in mind this clinical setting and timely obtain the cystic fluid specimen to guide further antibiotic treatment.

References

- 1. Habashi, S., & Draganov, P. V. (2009). Pancreatic pseudocyst. World journal of gastroenterology: WJG, 15(1), 38.
- 2. Negm, A. A., Poos, H., Kruck, E., Vonberg, R. P., Domagk, D., Madisch, A., ... & Lankisch, T. O. (2013). Microbiologic analysis of peri-pancreatic fluid collected during EUS in patients with pancreatitis: impact on antibiotic therapy. Gastrointestinal Endoscopy, 78(2), 303-311.
- 3. 保里惠一,成田洋,寺西太,羽藤誠記,伊藤昭敏,真下啓二,… & 由良二郎. (1993). 膵 仮性嚢胞より MRSA が検出された 1 例. 日本臨床外科医学会雑誌, 54(11), 2771-2775.