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Case Report: The Value of Vigilance and Iterative Evaluations with an Uncooperative Patient in the Emergency Department

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Case Report:

A male patient in the sixth decade of life, with a history of alcohol abuse, DM-II secondary to pancreatectomy, hypertension and stroke, presented to the Emergency Department (ED) via the Emergency Medicine System (EMS) for abdominal pain and an apparent suicidal attempt. EMS was called by the patient to a local motel, where they found the room filled with empty bottles of alcohol. The patient reported to EMS that he had not eaten or taken his medication, including insulin, for 5 days, in an apparent suicidal attempt. The patient had developed severe abdominal pain, prompting the EMS call. On arrival to the ED, the patient was confused and appeared to possibly inebriated. He was moderate distress and was very uncooperative, which made it difficult to obtain IV access, or to obtain a detailed medical history or HPI. He admitted to excessive daily alcohol ingestion over the prior week. He admitted to not taking insulin; but at the time of his ED evaluation he denied that his medication noncompliance was a suicidal attempt.

Physical examination showed vital signs with blood pressure 170/74, HR 111, pulse ox 98% on room air, BMI of 18.8 and an oral temp of 98.9℉. He was in acute distress with dry mucosa, tachycardia, but had clear lung fields and a diffusely tender abdomen with guarding. The rest of the physical was limited due to patient being uncooperative. The work-up was initially geared towards diabetic ketoacidosis, given the report from EMS and the patient's medical history and physical examination. A review of the patient's medical record revealed that he was seen nine months prior at a near-by hospital for a perforated bowel that was surgically repaired without complications. At the current visit, the alcohol level was 193; CMP showed an anion gap of 22, glucose 320; VBG pH 7.22 and bicarb 19; lactate 7.8; UA with ketone 2+, positive for glucose; CBC with WBC 11.5. CXR showed right basilar atelectasis and a translucency projection under the diaphragm bilaterally, suggesting pneumo-peritoneum, but was reported as being present on previous chest x-ray dated a year prior.

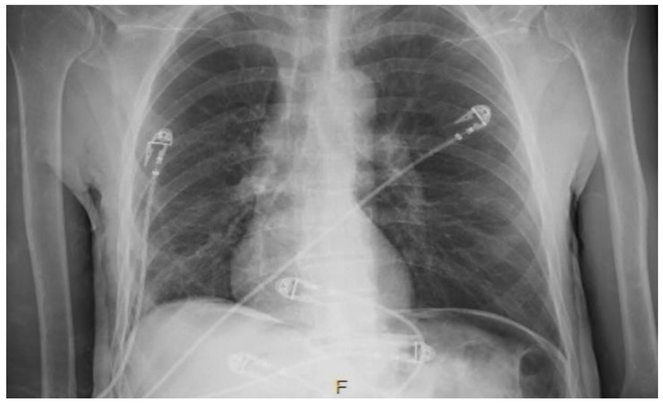

Fig. 1. PA view of portable CXR showing translucent projections infra-diaphragm bilaterally.

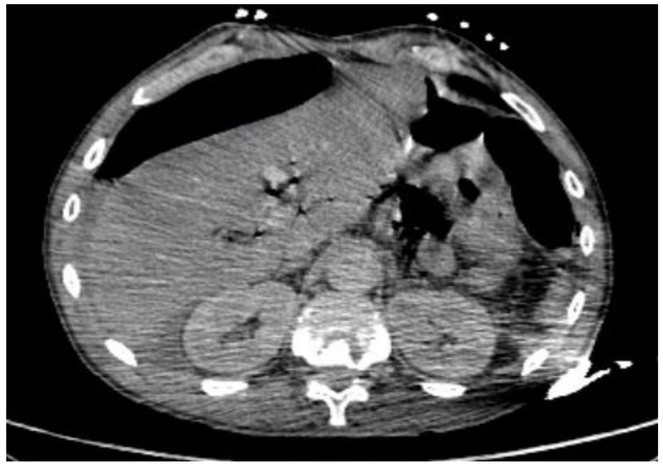

Fig. 2. Abdominal CT without contrast showing pneumoperitoneum.

The patient was started on 1L NS and was then switched to an infusion at 150ml/hr and was given an antiemetic, magnesium intravenously, an insulin infusion. Given the findings on the chest x-ray, detailed records of the patient's past surgical history were obtained electronically. The surgical history included an ERCP (2014) with biliary and pancreatic stenting, cholecystectomy (2016), splenectomy (2016) and a pancreatectomy with autologous transplant (2016), hepaticojejunostomy and gatrojejunostomy (2016).

A CT scan of the abdomen was then ordered. The results showed a large pneumo-peritoneum with a mild ileus and chronic surgical findings. The patient was transferred to a tertiary level of care for exploratory laparotomy celiotomy after broad spectrum antibiotics and additional pain medication given. He had an uncomplicated clinical course and was discharged from the hospital 8 days later.

Discussion

- **A Flexible and Vigilant Approach:** The initial presenting information from EMS could have led to anchoring bias on the preliminary diagnosis of DKA. A flexible approach led to new information which led to interative testing.
- **Iterative physical examination**. There are cases, as seen in this case report, where the physical examination unreliable or even impossible. Iterative evaluations led to a chest X-ray done, which ultimately led to the abdominal CT.
- **Iterative testing:** In the case presented, the radiologist reported the translucent projection under the diaphragm as being present on a CXR seen a year ago; however, given the patient's clinical presentation, further imaging studies were necessary as a pneumoperitoneum is an acute process.

References

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3. Thomas, S H. **Effect on Diagnostic Efficiency of Analgesia for Undifferentiated Abdominal Pain**. British journal of surgery : BJS. 90.1 (2003): 5–9.