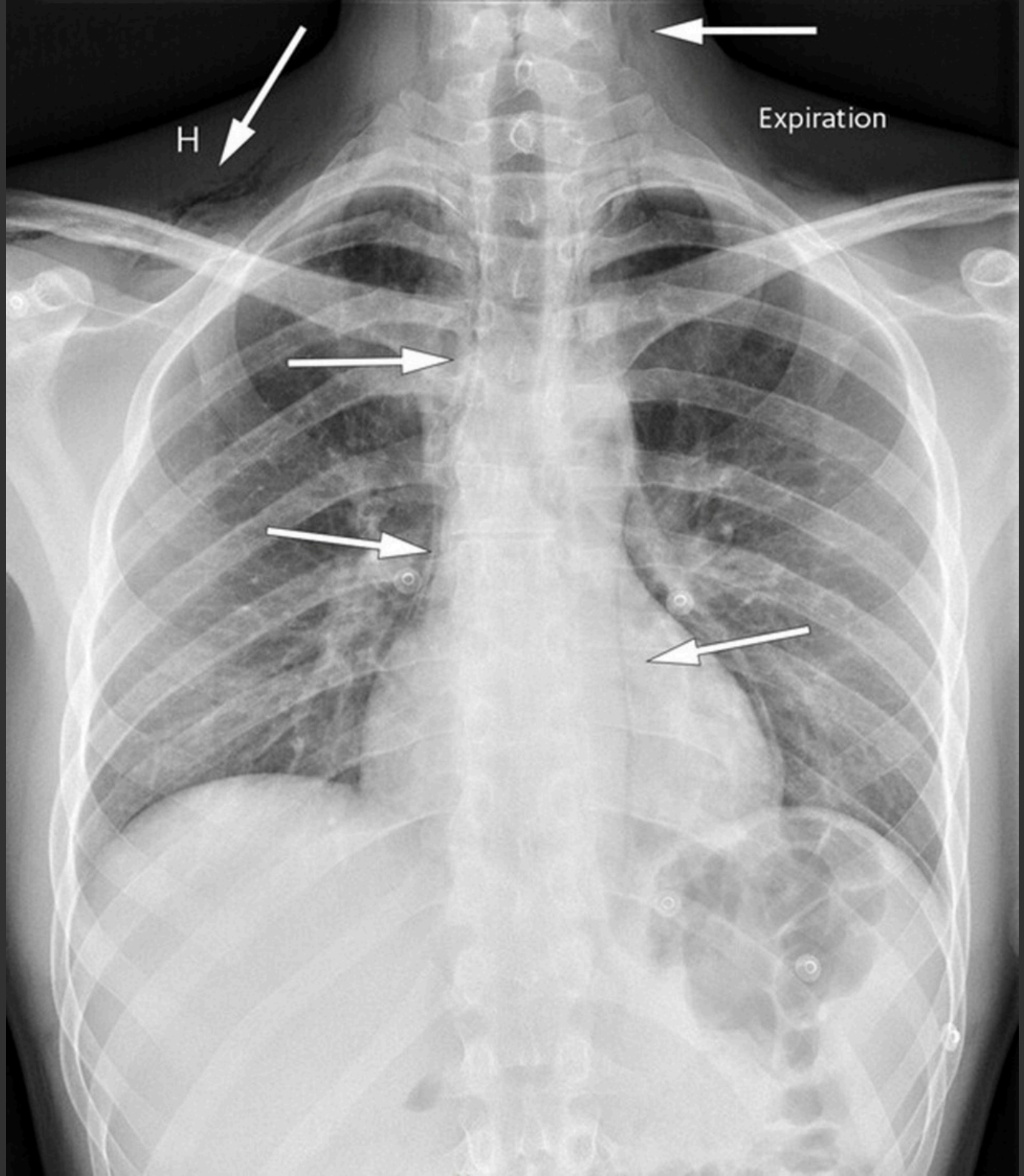
TRAUMA CASE OF THE WEEK

Case Nine

A middle-aged man arrives with a past history of pancreatitis, and a recent flare up lasting 48 hours, marked by excessive vomiting with abdominal pain.
This attack feels ‘different’, with more chest pain than he has had previously. Physical exam is remarkable for subcutaneous emphysema, and an odd crunching on cardiac auscultation. His ECG and cardiac markers are normal, but his chest Xray is NOT. There are convenient markers everywhere on the CXR.

- What does the Chest Xray show?
- Why do you think he has this problem?
- What further investigations do you think are warranted?
- What is the management of this problem (separate to the management of his acute pancreatitis)?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The Chest Xray shows pneumomediastinum, which has many potential causes. Physical signs can include subcutaneous emphysema. Generally, the management is expectant, with a focus on treating the cause... with the free air being gradually absorbed. In this case, although it could be due to a pulmonary rupture, the major concern is Boerhaaves syndrome (esophageal rupture from vomiting), with the gas coming from the GI tract. If the condition is undiagnosed (and therefor untreated) the mortality rate is 90%. It is not a diagnosis you want to miss! The next appropriate investigation would be a CT with oral contrast (Gastrograffin), to confirm/exclude esophageal perforation. Treatment is generally operative repair, with concomitant antibiotic cover... but some case reports are now emerging of patients with small leaks being managed with AB's, as an inpatient, followed conservatively. Best practice would still be to refer to an upper GI surgeon for management.