## CASE OF USELESS XRAY IN SEPSIS...POCUS COMES TO RESCUE

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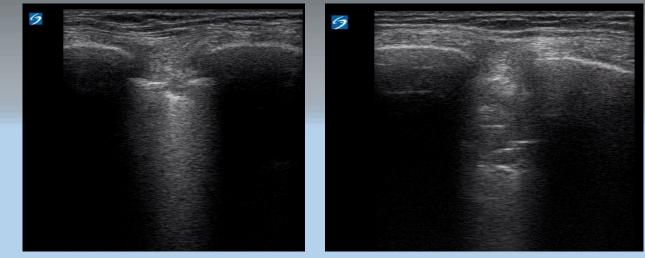
## **Case Presentation:**

A 70 year old female with h/o CCF was sent to ED, QMC by heart failure district nurse with suspected acute on chronic heart failure and fever. On examination her saturation was 94% on 2L  $O_2$  from nasal cannula and chronic bilateral pedal edema with normal JVP. She had bibasal crackles.

## **Management and Outcome:**

CXR showed left pleural effusion and overlying atelectasis/consolidation as seen in the CXR a month ago. POCUS scan did not show B line burden suggestive of acute pulmonary edema, instead dynamic airbronchograms were seen on the right chest which are highly suggestive of pneumonia. In under 30 mins post registration she had antibiotics tailored to source. Later in her blood tests revealed WCC 19.7 x10^9/L, neutrophils of 17 x10^9/L and CRP of 238. **Key learning points:** Ultrasound has been shown to be superior to CXR in several studies to identify pneumonia. Ultrasonographic features of pneumonia are dynamic airbronchograms, focal B lines, sub-pleural consolidation, effusion & hepatization of the lung.

These features when used in the right clinical context, serve a powerful data point in management of septic patients, thus limiting broad spectrum antibiotic use; helping in antibiotic stewardship and reducing drug resistance.



Right chest subpleural changes

Right chest air bronchograms on POCUS

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