**A 9 year old boy presents with 10 days of fever. There is no history of trauma. Their CXR is shown below.**

**1.     List the three most important abnormal findings in this Xray. (3 points)**

1. Mod-Large L sided pleural effusion/collection
2. Collapse or consolidation L lung lower zone
3. Tracheal deviation to R

**2.     List the most important relevant negative: (1 point)**

1. Normal heart size

**3.     What is the most likely clinical diagnosis?  (1 point)**

1. Left sided Empyema (need correct side in part 1 or 3), or Left sided pneumonia complicated by empyema

**4.     What other imaging modality would be most appropriate and useful to aid diagnosis and further management? (1 point)**

1. US lung: collection vs consolidation, +/- guidance for percutaneous tube placement

NOT CT!!!

1. **Outline required management in first 24 hours of care: (4 points)**
2. IV antibiotics – need appropriate high dose antibiotisc (3rd generation cephalosporin and Flucloxacillin) to include cover for Strep/Staph with appropriate dosing. This child is sick and should be treated appropriately
3. Drainage – either via ICC (possibly by U/S) or video assisted thoracoscopic surgery
4. Admission under the appropriate Respiratory / Paediatric Specialist Service
5. Supportive care: e.g. oxygenation to maintain O2 saturations ≥95%, IV fluids (eg 10ml/kg 0.9% NaCl titrated to MAP, and maintenance), analgesia as required (eg morphine with paed dosing/kg),
* Appropriate IV antibiotics and drainage were required for full marks. That is, if 4 appropriate answers were given but did not include these 2 answers, the maximum that could be scored for part 4 was 2 marks.
* If only one appropriate antibiotic was given, then 0.5 marks were given
* With Paediatric patient scenarios, please estimate the weight and give the dose of a medication that you are going to give. Don’t just write 50 mg/kg. Write 9 yo child, weight is ~26 kg and hence dose at 50 mg/kg is 1300 mg. Show this consultant level of expertise.

**Other General Points:**

1. Write one answer per line, not multiple answers per line. If line 1 has 2 answers on it, the answers provided on a lower line will be ignored.
2. If the question asks for 3 abnormal findings, don’t list 4 dot points. The 4th one will be ignored.
3. Answer as a Specialist Emergency Physician – i.e. you make the decisions about what is needed for the patient.