Neonatal Pneumonia

- Pneumonia in first 28 days of life
- Early onset: Typically presents within 48 hours
- Late onset: Presents in 2nd-4th weeks of life

Clinical Issues

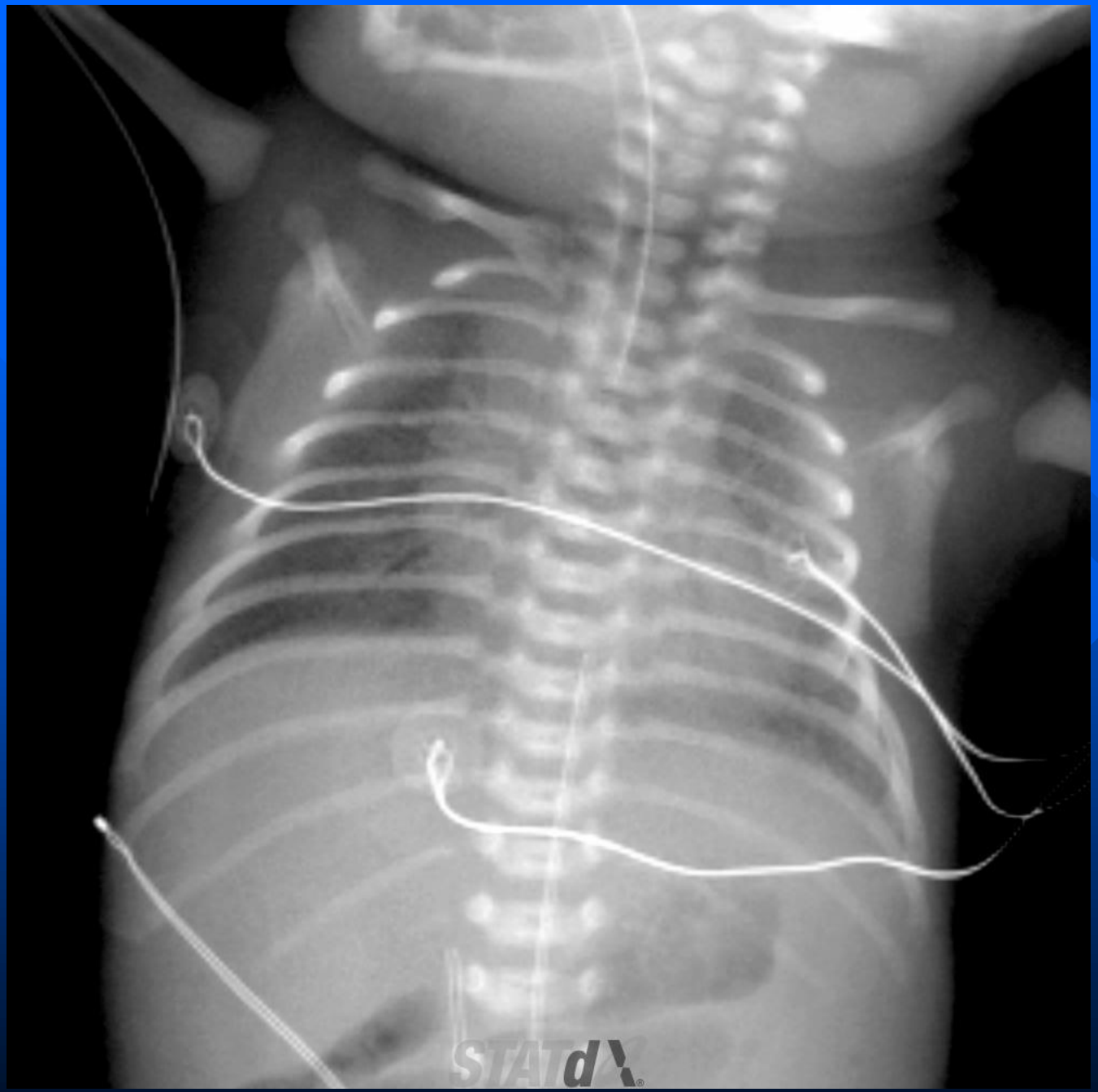
- Typical presentations:
  - Respiratory distress, sepsis
- Prevention: Universal screening at 35- to 37-weeks gestation for maternal GBS colonization
- Intrapartum antibiotic prophylaxis with penicillin
- Treatment of neonate
  - Early onset: Empiric ampicillin + gentamicin
  - Late onset: Empiric vancomycin + aminoglycoside

X-ray

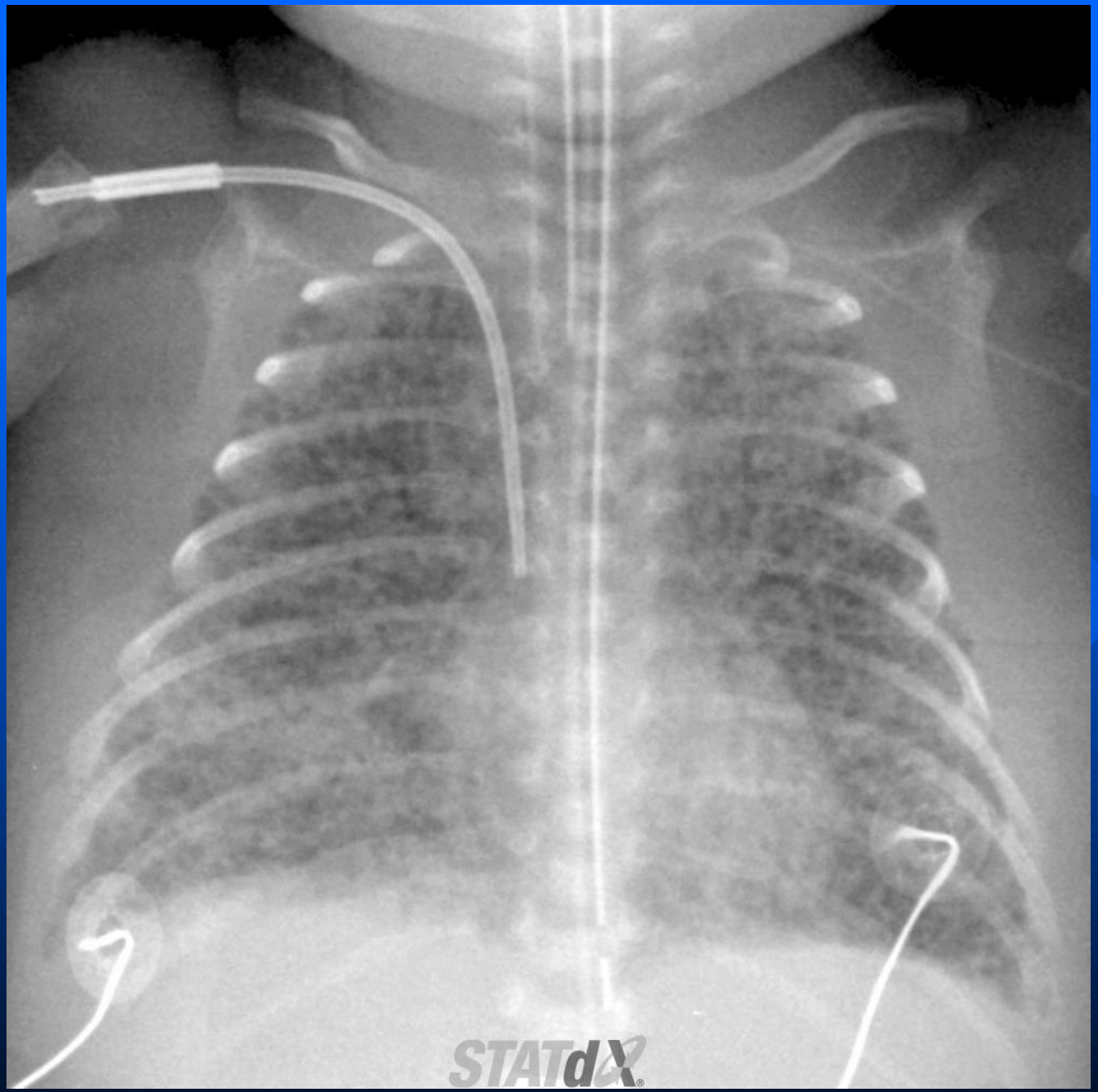
- Low lung volumes & granular opacities similar to surfactant deficiency (but pleural effusion in up to 67%)
- Confluent > patchy alveolar or reticular opacities; may be perihilar
- Complications: Pneumothorax, pneumomediastinum, pulmonary interstitial emphysema
- **Image Interpretation Pearls**
  - Consider if effusion accompanies radiographic findings otherwise suggestive of surfactant deficiency

Stages of pregnancy

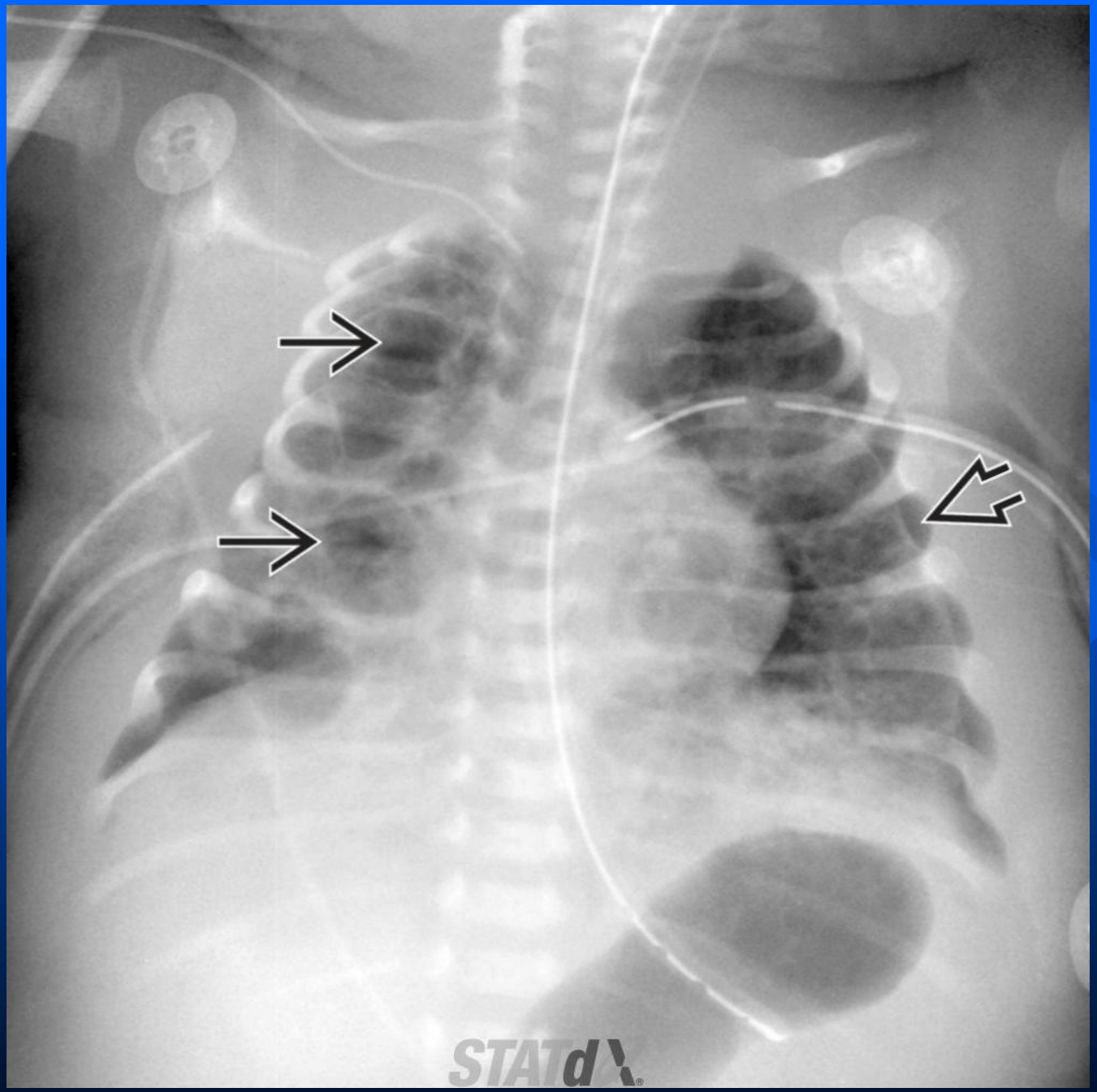
stage	starts	ends
Preterm[44]	-	at 37 weeks
Early term[45]	37 weeks	39 weeks
Full term[45]	39 weeks	41 weeks
Late term[45]	41 weeks	42 weeks
Postterm[45]	42 weeks	-



AP radiograph of the chest in a neonate with group B streptococcal pneumonia shows diffuse, bilateral hazy opacities with low lung volumes. This appearance is very similar to patients with surfactant deficiency disease.



AP radiograph of the chest in a patient with neonatal pneumonia shows increased lung volumes with diffuse nodular pulmonary opacities. Anasarca is also noted.



AP radiograph in a patient with neonatal pneumonia shows a left pneumothorax (black open arrow) & multiple bilateral pneumatoceles (black solid arrow), complications that can be seen with neonatal pneumonia.