Obstetric Case 3

Jan 2022

Clinical details:

36 year old gravida 2 para 1

Routine anomaly scan
Transverse view of fetal abdomen
Transverse sections through fetal thorax
Please try to answer the following questions:

1. What abnormality is present in this fetus?
2. What is the prognosis for this condition?
3. Name potential differential diagnoses
Do not progress to next slide until you have attempted the questions on the previous slide
Condition: Situs inversus totalis

- Incidence 1:10,000 live births
- Equal prevalence between male and female
- Take home message:

It is essential to establish fetal orientation at every scan otherwise serious conditions may be missed or misdiagnosed
Fact file: **Situs inversus totalis**

1. **Situs inversus totalis**
   - Complete reversal of chest and abdo contents
   - Heart, stomach and spleen on right, lungs reversed, liver and GB on left
   - Autosomal recessive inheritance
   - Both parents need to be carriers for a 1:4 chance of occurrence

2. **Prognosis is excellent**
   Unlikely to be associated with abnormal karyotype

3. **Differentials**
   - Diaphragmatic hernia
   - Dextrocardia
   - Cardiac right or left isomerism
     - Look for the moderator band in right ventricle and evidence of pulmonary branching

4. **Additional facts**
   - Occurs due to reversed rotation of the primitive loop during 4th week of embryology
   - May be associated with Kartagener’s syndrome