



QUIZ 1

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Questions

- Q1. What are the findings in image A and B?
- Q2. What is your diagnosis?
- Q3. What are the types of this syndrome?
- Q4. What are the predisposing factors?

QUIZ 1

Answers

Answer 1:

Image A:

- There is complete agenesis of sacrum and L5 vertebra.
- Fusion of iliac bone with narrowing of pelvic cavity.
- Lateral splaying of pubic bones with widened pubic symphysis.
- Pseudo acetabulum on right side.
- Superolateral subluxation of right femur and subluxation of left femur.
- Shallow acetabulum and short iliac wings on both sides.

Image B:

- Sacral agenesis.
- Cord termination at L4.
- Tethered spinal cord
- Club shaped configuration of conus.

Answer 2: Caudal regression syndrome type IV.

Answer 3: Type I: Unilateral partial agenesis localized to sacrum/coccyx.

Type II: Bilateral partial symmetric defects of sacrum + ilio sacral articulation.

Type III: Total sacral agenesis + ilio lumbar articulation.

Type IV: Total sacral agenesis + ilio iliac fusion posteriorly.

Answer 4: Infant of diabetic mothers, risk increase by 200- 400 times in women dependent on insulin. 16-22% of children with sacral agenesis have mothers with DM.

References

1. Lowe LH, Johaneck AJ, Moore CW. Sonography of the neonatal spine: part 2, Spinal disorders. *AJR Am J Roentgenol.* 2007;**188(3)**: 739-44.
2. Stroustrup Smith A, Grable I, Levine D. Case 66: caudal regression syndrome in the fetus of a diabetic mother. *Radiology.* 2004; **230(1)**: 229-33.
3. Nievelstein RA, Valk J, Smit LM et-al. MR of the caudal regression syndrome: embryologic implications. *AJNR Am J Neuroradiol.* 1994; **15(6)**: 1021-9.