IV DSA is the Best Way To Assess Occlusive Disease Of The Aorta And Its Branches In Children: Embolization May Be Best Treatment For Segmental Renal Artery Stenosis Causing Hypertension

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IV DSA is the Best Way to Assess Occlusive Disease Of The Aorta And Its Branches In Infants and Children

IV DSA: A 3 mo old infant with hypertension, SOB, and cardiomyopathy

IV DSA: Later Arterial phase

IV DSA: A 5 yr old male with occluded right common femoral artery
**IV DSA: Pros and Cons**

- **Pros**
  - IV access
  - Less invasive
  - Safer and faster
  - No risk of arterial injury

- **Cons**
  - Increased contrast load
  - Limited contrast injections
  - No selective catheterization
  - Preclude interventions

**Embolic Control of Hypertension Caused by Segmental Renal Artery Stenosis**

**Segmental Renal Artery Stenosis: 8 year old female with hypertension**

**Technique:**

- Alcohol embolization of segmental renal artery stenosis
- Superselective angiogram through coaxial catheter
- Tuberculin syringe for alcohol injection
- Estimate alcohol volume with contrast injection distal to the stenosis

**Completion Left Renal Angiogram**

**Conclusions**

- IV DSA is the best way to assess occlusive disease of the aorta and its branches in infants and children.
- Embolization may be best treatment for segmental renal artery stenosis causing hypertension. It presents an alternative to a major operative procedure such as arterial bypass, arterial dilatation, or partial nephrectomy.