To describe our experience in cardiac catheterization in children via the transhepatic approach when conventional venous access is impossible.

**AIM**

**TECHNIQUE**

- All procedures were performed under general anesthesia.
- Blood pressure was monitored using an indwelling arterial catheter.
- A 21 G, 4 cm long (Cook) needle was introduced under fluoroscopy control in the mid to anterior axillary line below the costal margin.
- We obtained hepatic access using a standard Seldinger technique.
- When possible, mapping of suprahepatic veins from SVC was obtained before puncture.
- The needle was exchanged for a 4F to 6F sheath.
- The liver tract was occluded in all patients unless a central venous catheter was placed: - vascular plug (n=3)
  - coils (n=1)
  - botn (n=2)

**RESULTS**

- Hepatic access was obtained in all 12 attempts. 7 diagnostic procedures, 5 interventional procedures.
- Central venous catheter was placed in 6 patients:
  - Patient 10. Right pulmonary vein stenosis.
  - Patient 7. Occlusion of atrial septal defect (figula flex 16/18 mm)

**COMPLICATIONS**

- Peritoneal bleeding in one patient resolved with conservative treatment.
- The coil implanted in the hepatic tract had embolized to the abdominal cavity.

**CONCLUSIONS**

The percutaneous transhepatic technique can provide a safe approach for cardiac catheterization in children. In our experience, this approach might minimize the risk of bleeding. This approach is also useful for complex patients including management of central venous access.