CHD Clinical Practice Algorithm: PDA < 18 Years of Age

Inclusion Criteria:
- PDA diagnosed via echo at age < 18 years

Exclusion Criteria
- Pregnancy

Presentation

Initial standard workup:
- Clinic Visit
- ± ECG
- Echocardiogram (at diagnosis)

Trivial “silent” PDA

Discharge from care

PDA Size/characteristics*

≥ Moderate PDA

Refer for intervention

Small PDA

Age < 1 year:
- Follow-up every 3-6 months

Age > 1 year:
- Follow 2-3 years with an echocardiogram

Left heart dilation

Yes

No

Follow up q2-3 years with echo +/- ECG or consider elective closure

*echo evidence of elevated right-sided pressures should prompt further evaluation for pulmonary hypertension
**CHD Clinical Practice Algorithm:**

**PDA Post-Intervention**

**Inclusion Criteria:**
- After surgical or cath based PDA closure

**Post Surgical Closure:**
Prior to discharge:
- CXR
- Echo
- Clinic follow-up within 2 weeks to 3 months with echo

**Post Cath Closure:**
Prior to discharge:
- CXR
- Echo
- Clinic follow-up within 2 weeks to 3 months with echo based on device protocol

**Residual PDA LPA obstruction Arch obstruction**

**Severity**
- Mild
  - Follow-up with echo every 1-2 years
  - Consider CMR, CCT or lung perfusion scan if supplemental information is needed
- ≥Moderate
  - Consider intervention

**Type of Intervention**
- Surgical
  - May discharge from care
- Transcatheter
  - Annual follow-up for the first 2 years with echo
  - Follow-up every 3-5 years with echo
**Inclusion Criteria:**
- >18 years of age
- Diagnosed via echo with a PDA

**Exclusion Criteria:**
- Pregnancy

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**Presentation**

**Initial standard workup:**
- Clinic Visit
- ECG
- Echocardiogram
- Upper/Lower extremity pulse ox

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**Hemodynamic Significance? (left sided chamber enlargement)**

- If trivial and "silent:"
  - Discharge from care
- If audible:
  - Routine surveillance q3-5 yrs with clinic visit, ECG, and TTE

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**No**

- PVR < 3 WU (Class I indication)
  - PDA closure (Device closure preferred)
  - Go to Post-intervention follow up
- PVR 3-5 WU Qp:Qs >1.5 (Class IIA indication)
  - PDA closure (Device closure preferred)
  - Go to Post-intervention follow up
- PVR > 5 WU Qp:Qs >1.5 LE SpO2 > 90% (Class IIB indication; Individual decision at an expert center)
  - PDA closure (Device closure preferred)
  - Go to Post-intervention follow up
- Does not meet any criteria for closure
  - Refer for PAH therapy
    - Follow up Q6-Q12 months depending on clinical status
      - Clinic visit
      - ECG
      - Pulse oximetry
      - Annual exercise testing
      - Annual TTE

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**Yes**

- Assessment for pulmonary arterial hypertension

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References