To close or not to close?
That is the question

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**Case 1: 26 ♂**

- d-TGA, Rashkind’s procedure
  Atrial switch – Senning @ 8mths
- Suspicion of baffle leak in TTE
- Asymptomatic

- 24y CPET: peak VO2 32.8 ml/min/kg
  (73% predicted)

- CMR: 2 large baffle leaks
  L→R shunt, Qp/Qs 1.9
  1 @ IVC baffle, 1 @ PV
  Large LV (sub-pulmonary ventricle)
  LVEDVi 149ml/m2, LVEF 59%
  RVEDVi 104ml/m2, RVEF 51%
Case 2: 26 ♂

- d-TGA, Rashkind’s procedure
  Atrial switch- Senning @ 9mths

- 17y CMR: 1 large baffle leak
  L→R shunt, Qp/Qs 1.5
  LVEDVi 94ml/m²

- Oligosymptomatic (NHYA II)
- Obese (BMI 40 kg/m²)

- CPET: peak VO₂ 20.3ml/min/kg
  (68% predicted)

- 22y CMR: 1 large baffle leak near AV valves,
  L→R shunt, Qp/Qs 2.1
  LVEDVi 107ml/m², LVEF 54%,
  RVEDVi 101ml/m², RVEF 42%
What would you do?

1. To close or not to close?

2. If you close it- how?
Case 1. Surgical closure

Case 2. Percutaneous closure

One patch-closure and one direct closure

Amplatzer Septal Occluder 20mm
C.1 Surgical Closure of 2 Baffle Leaks
Case 1. Follow-up CMR/ CPET

<table>
<thead>
<tr>
<th></th>
<th>LVEDVi</th>
<th>RVEDVi</th>
<th>RVEF</th>
<th>peak VO2</th>
<th>%predicted</th>
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</thead>
<tbody>
<tr>
<td><strong>Before</strong></td>
<td>149</td>
<td>104</td>
<td>51</td>
<td>32.8</td>
<td>73</td>
</tr>
<tr>
<td><strong>After</strong></td>
<td>88</td>
<td>104</td>
<td>50</td>
<td>28.3</td>
<td>109</td>
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</tbody>
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![Heart MRIs]
Thank you very much for your attention
Table 16  Indications for intervention in transposition of the great arteries after atrial switch

<table>
<thead>
<tr>
<th>Indications</th>
<th>Class</th>
<th>Level</th>
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<td>Symptomatic patients with baffle leaks not amenable for stenting should be treated surgically</td>
<td>I</td>
<td>C</td>
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Indications for surgical intervention

1. Surgeons with training and expertise in CHD should perform operations in patients with d-TGA and the following indications:
   a. Moderate to severe systemic (morphological tricuspid) AV valve regurgitation without significant ventricular dysfunction. (Level of Evidence: B)
   b. Baffle leak with left-to-right shunt greater than 1.5:1, right-to-left shunt with arterial desaturation at rest or with exercise, symptoms, and progressive ventricular enlargement that is not amenable to device intervention. (Level of Evidence: B)

Indications for catheter intervention

1. Stenting (covered) or device closure should be performed in patients with baffle leaks and symptoms due to L→R shunt
2. Stenting (covered) or device closure should be considered in asymptomatic patients with baffle leaks with substantial ventricular volume overload due to L→R shunt
26 ♂
d-TGA, neonatal Raskind, atrial switch – Senning @ 8mths

19y: 2 large leaks in CMR (2008), oligo/asymptomatic

CPET (2008): peak VO2 32.8 ml/min/kg (73% predicted)

24y CMR (2013): 1 @ IVC baffle, 1 @ PV baffle, Qp/Qs 1.9
Large LV (sub-pulmonary ventricle)
LVEDVi 149 ml/m², LVEF 59%
RVEDVi 104 ml/m², RVEF 51%
25 ♂
d-TGA, neonatal Raskind, atrial switch- Senning @ 9mths

16y: suspicion of a baffle leak in TEE

22y CMR (2011): 1 large baffle leak near AV valves, Qp/Qs 2.
LVEDVi 107ml/m2 (xx), LVEF 54%,
RVEDVi 101ml/m2 (xx), RVEF 42%

Oligosymptomatic (), obese (BMI kg/m2),

CPET 20xx : peak VO2 20.3ml/min/kg (68% predicted)