

## Sample Reports

Your software comes with five sample cases that illustrate various features of *PedCath*.

It is recommended that you spend some time reviewing these examples and entering practice cases before logging actual data.

1. John Doe. This case illustrates a **single cath with a single set of hemodynamics**.

Note that with a single set of hemodynamics, the Summary page includes additional information.

The following printing options have been selected:

- a) **Summary** is selected. This creates a one-page summary of the cath record, including an image of the diagram.
- b) **Expanded Calculations** is selected, generating a full-page listing of the all the calculations for the sample cath.
- c) **Measurements** box is checked, so the report includes a one-page summary of the optional measurements for the cath.
- d) **Full Page Diagram** is selected. The large diagram includes any embedded hemodynamic data.
- e) **Diagram Caption** is checked. Notice that the line “**Arrows indicate catheter course**” and appears below the diagram on both the summary page and full-page diagram. Clicking the Options button in the lower right of the Cath Report Setup window may change the caption text.

2. John Deere. This case illustrates a **single cath with two sets of hemodynamics**.

Since the Summary page includes more than one set of hemodynamic data, only the summary information is printed for each set. Full hemodynamic data can be printed on subsequent pages.

Printing options:

- a) **Summary** is selected.
- b) The cath is then locked to prevent further editing.
- c) Later, the patient’s weight is corrected to 12.3 Kg.
- d) A second report is printed, with note that it had been modified.

3. Lotsa Oxygen. A single cath with two sets of hemodynamics—**includes dissolved oxygen**.

If non-zero PO<sub>2</sub> values are entered in the CALCULATION OVERRIDE window, dissolved oxygen is calculated.

Printing options:

- a) **Summary, Expanded Calculations and Full-Page Diagram** are selected.
- b) **Documents** box is checked. The **cath report narrative** and **letter to the referring physician** are now included.
- c) Note text formatting used in the anatomy diagram. A bold font has been used in the diagram to accent values obtained on 100% O<sub>2</sub>.

4. Angela Plastie. This case illustrates the **Image Manager** feature.

Printing options:

- a) **Summary** report is selected.
- b) **Images** report is also selected, showing before and after waveform and angio images.

5. Buck Rogers. This case illustrates a **patient with two caths**.

In the BROWSE screen, patients with multiple caths will have those caths listed in reverse date order (i.e. from most recent cath at the top to earliest cath at the bottom).

Printing options:

- a) Rogers’ first cath is printed with all print options except **Summary** and **Diagram Options** turned off, to produce a single page report.



# Institut Cardiovasculaire Paris Sud

Institut Hospitalier Jacques Cartier  
 Cardiologie Pédiatrique  
 Cardiac Catheterization Laboratory

## Doe, John

MRN: 123456789012  
 Birth Date: 09/19/1995  
 Cath Date: 09/26/1996  
 Cath #: 95c-bb11  
 Age at cath: 12 months  
 Gender: Male

Attending: William Hammill, MD  
 Fellow: Sara E. Regan, MD  
 Referring: Dr. Kymberly Shackelford

Height: 85.0 cm Weight: 9.5 kg  
 BSA = 0.47 m<sup>2</sup>

Fluoro: 16.00 min Contrast: 12.00 mL  
 Vein: right femoral  
 Artery: right femoral

### Example cath

Qp = 9.72 L/min (20.68 L/min/m<sup>2</sup>)  
 Qs = 2.59 L/min (5.51 L/min/m<sup>2</sup>)  
 Rp = 1.65 units (0.77 units x m<sup>2</sup>)  
 Rs = 21.22 units (9.97 units x m<sup>2</sup>)  
 Qp/Qs = 3.75 : 1 | Rp/Rs = 0.08

Heart Rate: 121 bpm  
 VO<sub>2</sub>: 198 ml/min/m<sup>2</sup>  
 Hemoglobin: 8.8 gm/dL

Inspired O<sub>2</sub>: 21%

pH: 7.37  
 pCO<sub>2</sub>: 43.0  
 pO<sub>2</sub>: 83.0  
 HCO<sub>3</sub>: 25.0

Thermo CO:

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
67	SVC			
81	RA			6
88	RV	50	7	
89	PA	37	13	25
	RPA			
	LPA	37	12	22

Right	Left
Wedge Mean	9

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
97	LA			8
	LV	95	10	
97	aAO	95	39	57
97	dAO	97	40	61

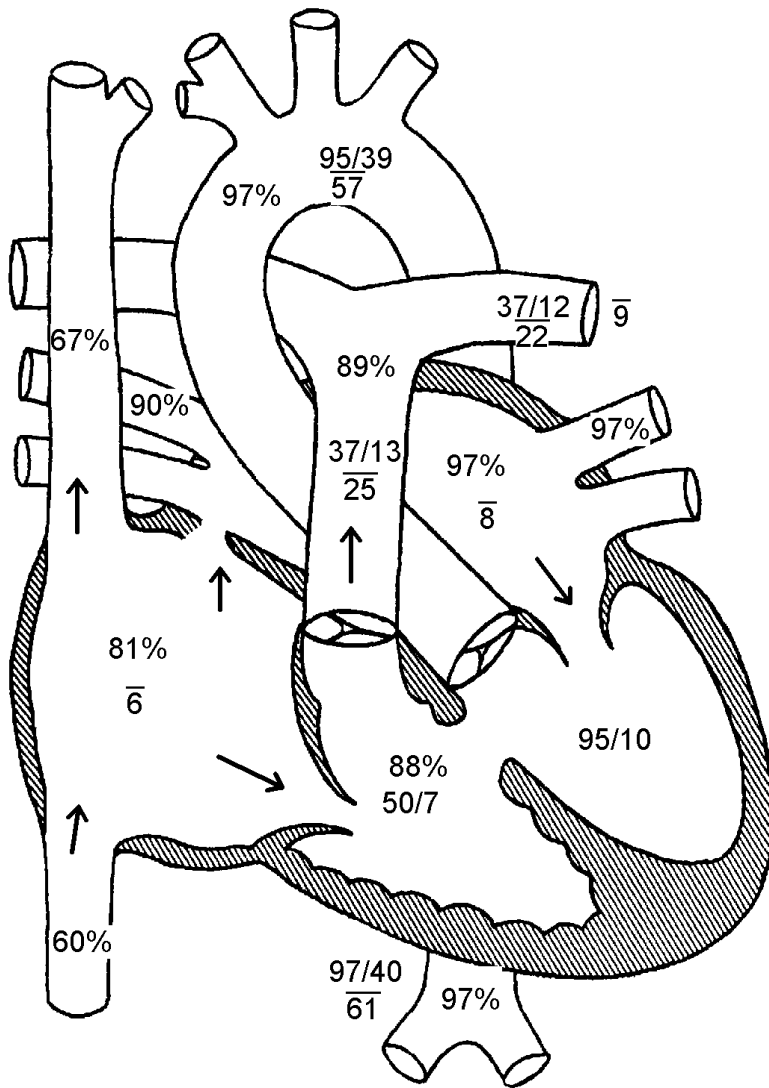
IVC: O<sub>2</sub> %: 60

Mean: 6

Femoral Artery: O<sub>2</sub> %: 97  
 Sys/A: 99 Dias/V: 42 Mean: 63

L.U. Pulm. Vein: O<sub>2</sub> %: 97  
 Mean: 8

R.U. Pulm, Vein: O<sub>2</sub> %: 90  
 Mean: 7



Arrows indicate catheter course.

### Diagnoses / Procedures

- 130. VSD, perimembranous
- 20. ASD, secundum
- 241. Respiratory disease

### Comments

Left to right shunt, large  
 Right lung atelectasis



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Cath Date: 09/26/1996  
Cath #: 95c-bb11  
Age at cath: 12 months  
Gender: Male

Attending: William Hammill, MD  
Fellow: Sara E. Regan, MD  
Referring: Dr. Kymberly Shackelford

Height: 85.0 cm Weight: 9.5 kg  
BSA = 0.47 m<sup>2</sup>

Fluoro: 16.00 min Contrast: 12.00 mL  
Vein: right femoral  
Artery: right femoral

### Example cath

Calculations:

$$\text{O2 capacity} = \text{HB} \times 1.36$$
$$11.97 = 8.8 \times 1.36$$

$$\text{MV O2 content} = (\text{O2 capacity} \times \text{MV sat})$$
$$8.02 = (11.97 \times 0.67)$$

$$\text{SA O2 content} = (\text{O2 capacity} \times \text{SA sat})$$
$$11.61 = (11.97 \times 0.97)$$

$$\text{PA O2 content} = (\text{O2 capacity} \times \text{PA sat})$$
$$10.65 = (11.97 \times 0.89)$$

$$\text{PV O2 content} = (\text{O2 capacity} \times \text{PV sat})$$
$$11.61 = (11.97 \times 0.97)$$

$$\text{Qp} = \text{O2 consumption} / ((\text{PV} - \text{PA content}) \times 10)$$

$$\text{Qs} = \text{O2 consumption} / ((\text{SA} - \text{MV content}) \times 10)$$
$$5.51 \text{ L/min/m}^2 = 198 / ((11.61 - 8.02) \times 10)$$

$$\text{Rp} = (\text{mean MPA} - \text{wedge}) / \text{Qp}$$
$$0.77 \text{ units} \times \text{m}^2 = (25 - 9) / 20.68 \text{ L/min/m}^2$$

(Wood's units x Meters<sup>2</sup>)

$$\text{Rs} = (\text{mean sys} - \text{mean RA}) / \text{Qs}$$
$$9.97 \text{ units} \times \text{m}^2 = (61 - 6) / 5.51 \text{ L/min/m}^2$$

(Wood's units x Meters<sup>2</sup>)

Dissolved oxygen not calculated.

Values used:

MV sat = 67  
PA sat = 89  
Mean MPA = 25  
Mean Sys = 61  
HB = 8.8

PV sat = 97  
SA sat = 97  
Wedge = 9.0  
Mean RA = 6  
BSA = 0.47 m<sup>2</sup>  
O2 consumption = 198 mL/Min/m<sup>2</sup>

### Example cath

Qp = 9.72 L/min (20.68 L/min/m<sup>2</sup>)  
Qs = 2.59 L/min (5.51 L/min/m<sup>2</sup>)  
Rp = 1.65 units (0.77 units x m<sup>2</sup>)  
Rs = 21.22 units (9.97 units x m<sup>2</sup>)  
Qp/Qs = 3.75 : 1 | Rp/Rs = 0.08

Heart Rate: 121 bpm  
VO2: 198 ml/min/m<sup>2</sup>  
Hemoglobin: 8.8 gm/dL

Inspired O2: 21%

pH: 7.37  
pCO2: 43.0  
pO2: 83.0  
HCO3: 25.0

Thermo CO:

%O2	Site	Sys/A	Dias/V	Mean
67	SVC			
81	RA			6
88	RV	50	7	
89	PA	37	13	25
	RPA			
	LPA	37	12	22

Right	Left
Wedge Mean	9

%O2	Site	Sys/A	Dias/V	Mean
97	LA			8
	LV	95	10	
97	aAO	95	39	57
97	dAO	97	40	61

IVC: O2%: 60

Mean: 6

Femoral Artery: O2%: 97  
Sys/A: 99 Dias/V: 42 Mean: 63

L.U. Pulm. Vein: O2%: 97  
Mean: 8

R.U. Pulm, Vein: O2%: 90  
Mean: 7



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## Doe, John

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Cath #: 95c-bb11  
Age at cath: 12 months  
Gender: Male

Attending: William Hammill, MD  
Fellow: Sara E. Regan, MD  
Referring: Dr. Kymberly Shackelford

Height: 85.0 cm Weight: 9.5 kg  
BSA = 0.47 m<sup>2</sup>

Fluoro: 16.00 min Contrast: 12.00 mL  
Vein: right femoral  
Artery: right femoral

### Example cath

Ventricular Volume

	EDV	ESV	EF%
Right	46.5	23.0	51%
Left	26.3	8.9	66%

Ventricular Mass

gm
20.0

PA Diameter

	mm
Right	10.3
Left	8.8

PA Index: 307  
PA Area Index: 1.50

Valve Diameter

	mm
TV	18.0
MV	19.0
PV	15.0
AV	13.0

### Example cath

Qp = 9.72 L/min (20.68 L/min/m<sup>2</sup>)  
Qs = 2.59 L/min (5.51 L/min/m<sup>2</sup>)  
Rp = 1.65 units (0.77 units x m<sup>2</sup>)  
Rs = 21.22 units (9.97 units x m<sup>2</sup>)  
Qp/Qs = 3.75 : 1 | Rp/Rs = 0.08

Heart Rate: 121 bpm  
VO2: 198 ml/min/m<sup>2</sup>  
Hemoglobin: 8.8 gm/dL

Inspired O2: 21%

pH: 7.37  
pCO2: 43.0  
pO2: 83.0  
HCO3: 25.0

Thermo CO:

%O2	Site	Sys/A	Dias/V	Mean
67	SVC			
81	RA			6
88	RV	50	7	
89	PA	37	13	25
	RPA			
	LPA	37	12	22

Right	Left
	9

%O2	Site	Sys/A	Dias/V	Mean
97	LA			8
	LV	95	10	
97	aAO	95	39	57
97	dAO	97	40	61

IVC: O2%: 60

Mean: 6

Femoral Artery: O2%: 97

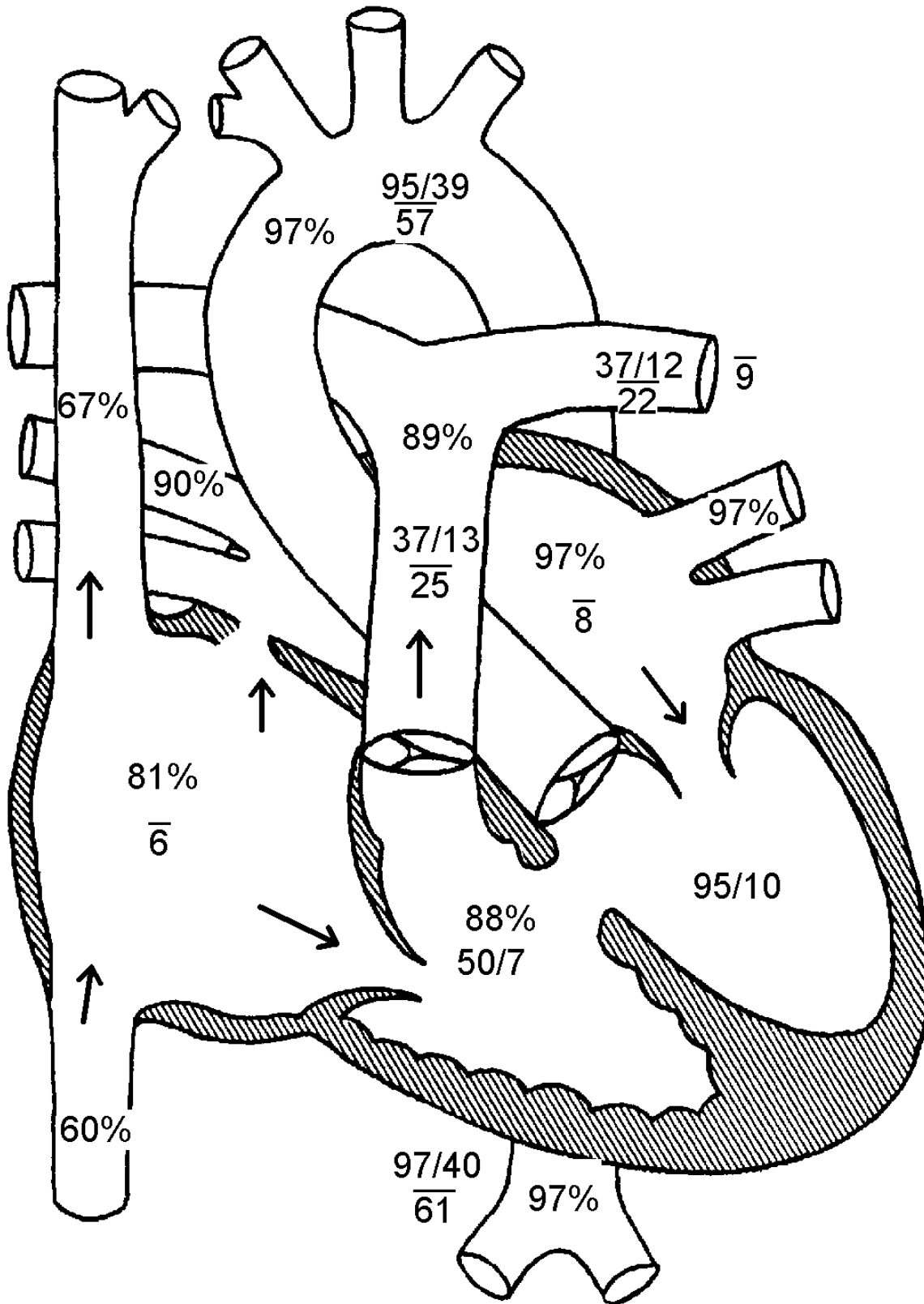
Sys/A: 99 Dias/V: 42 Mean: 63

L.U. Pulm. Vein: O2%: 97

Mean: 8

R.U. Pulm. Vein: O2%: 90

Mean: 7



Arrows indicate catheter course.



# Royal Children's Hospital

Melbourne, Victoria  
Pediatric Cardiology  
Cardiac Catheterization Laboratory

## Deere, John

MRN: 1234567  
Birth Date: 01/05/1995  
Cath Date: 09/24/1995  
Cath #: 783  
Age at cath: 8 months  
Gender: Male

Attending: Matherne MD, Paul  
Fellow: Heller MD, Felice  
Referring:

Height: 82.0 cm Weight: 11.4 kg  
BSA = 0.49 m<sup>2</sup>

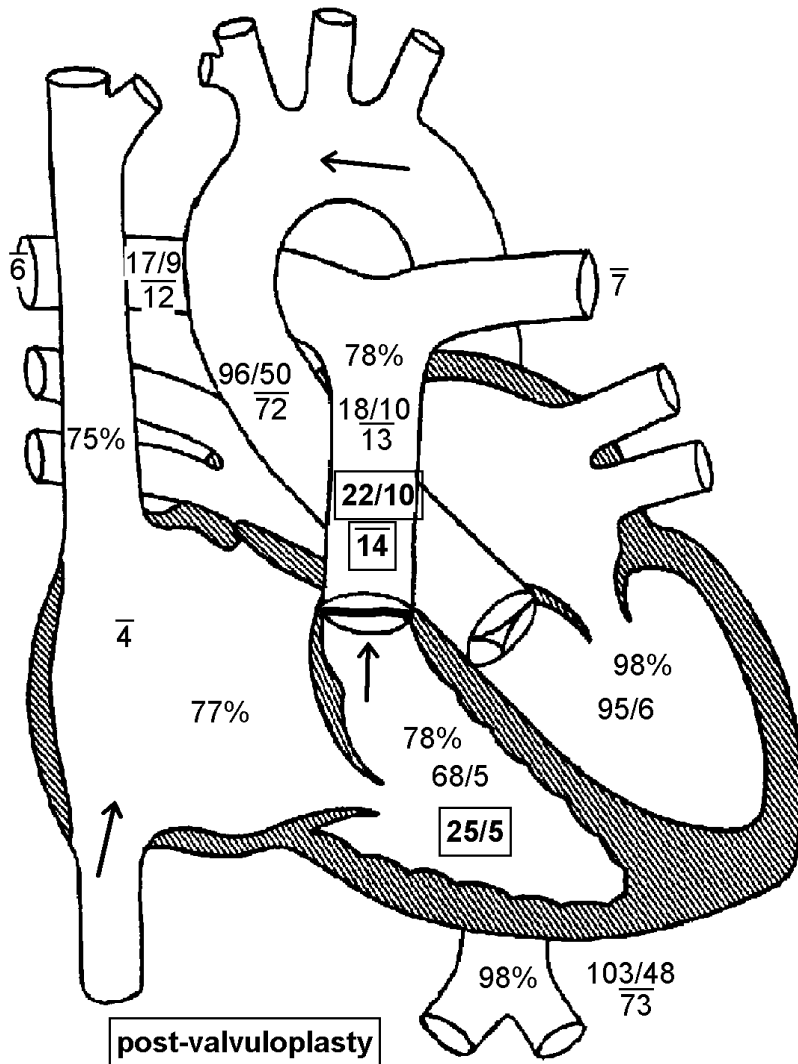
Fluoro: 16.00 min Contrast: 45.00 mL  
Vein: 5 French, LfV  
Artery: 20 ga angiocath RFA

### Pre-valvuloplasty

Qp = 2.85 L/min (5.82 L/min/m<sup>2</sup>)  
Qs = 2.48 L/min (5.06 L/min/m<sup>2</sup>)  
Rp = 2.28 units (1.12 units x m<sup>2</sup>)  
Rs = 27.81 units (13.63 units x m<sup>2</sup>)  
Qp/Qs = 1.15 : 1 | Rp/Rs = 0.08

### Post-valvuloplasty

Qp = 2.85 L/min (5.82 L/min/m<sup>2</sup>)  
Qs = 2.85 L/min (5.82 L/min/m<sup>2</sup>)  
Rp = 2.10 units (1.03 units x m<sup>2</sup>)  
Rs = 23.83 units (11.68 units x m<sup>2</sup>)  
Qp/Qs = 1.00 : 1 | Rp/Rs = 0.09



Arrows indicate catheter course.

### Diagnoses / Procedures

- 85. Pulmonary Valve Stenosis
- 597. Balloon Pulmonary Valvuloplasty

### Comments

Bicuspid pulmonary valve.  
Moderate pulmonary insufficiency.  
Hyperdynamic outflow tract.  
No residual outflow tract gradient.



# Royal Children's Hospital

Melbourne, Victoria  
Pediatric Cardiology  
Cardiac Catheterization Laboratory

## Deere, John

MRN: 1234567  
Birth Date: 01/05/1995  
Cath Date: 09/24/1995  
Cath #: 783  
Age at cath: 8 months  
Gender: Male

Attending: Matherne MD, Paul  
Fellow: Heller MD, Felice  
Referring:

Height: 82.0 cm Weight: 12.4 kg  
BSA = 0.51 m<sup>2</sup>

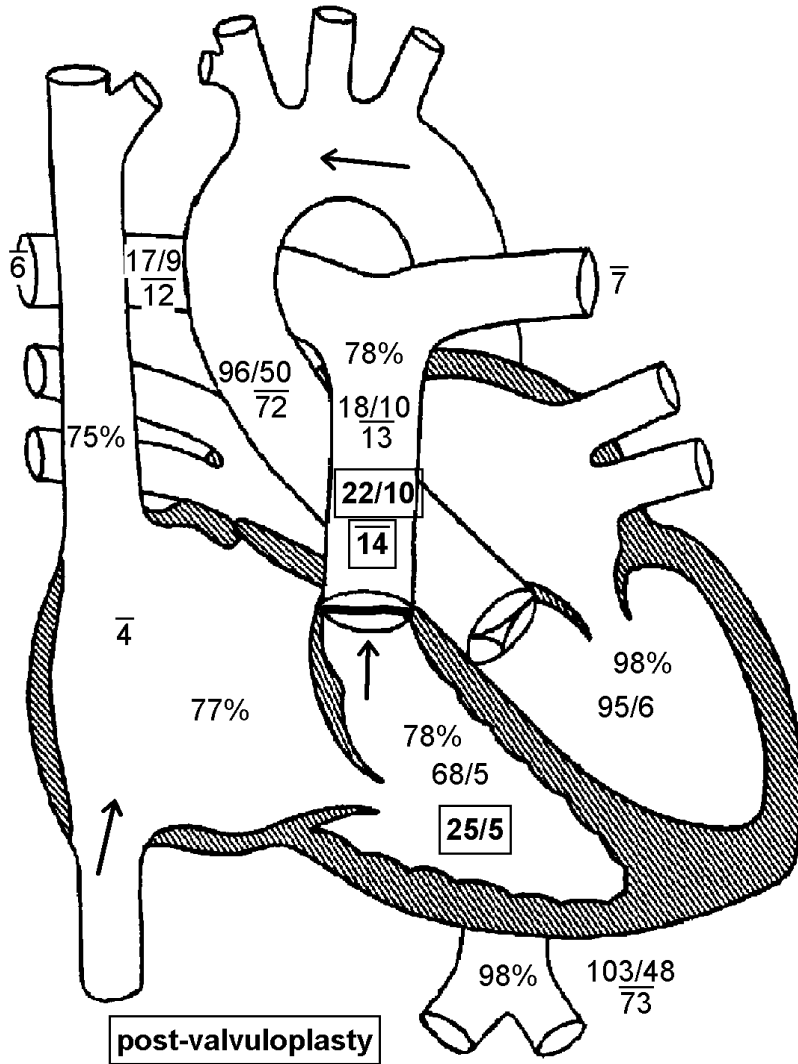
Fluoro: 16.00 min Contrast: 45.00 mL  
Vein: 5 French, LfV  
Artery: 20 ga angiocath RFA

### Pre-valvuloplasty

Qp = 2.97 L/min (5.82 L/min/m<sup>2</sup>)  
Qs = 2.58 L/min (5.06 L/min/m<sup>2</sup>)  
Rp = 2.19 units (1.12 units x m<sup>2</sup>)  
Rs = 26.72 units (13.63 units x m<sup>2</sup>)  
Qp/Qs = 1.15 : 1 | Rp/Rs = 0.08

### Post-valvuloplasty

Qp = 2.97 L/min (5.82 L/min/m<sup>2</sup>)  
Qs = 2.97 L/min (5.82 L/min/m<sup>2</sup>)  
Rp = 2.02 units (1.03 units x m<sup>2</sup>)  
Rs = 22.90 units (11.68 units x m<sup>2</sup>)  
Qp/Qs = 1.00 : 1 | Rp/Rs = 0.09



Arrows indicate catheter course.

### Diagnoses / Procedures

- 85. Pulmonary Valve Stenosis
- 597. Balloon Pulmonary Valvuloplasty

### Comments

Bicuspid pulmonary valve.  
Moderate pulmonary insufficiency.  
Hyperdynamic outflow tract.  
No residual outflow tract gradient.



# The University of Virginia Health Sciences Center

The Children's Medical Center  
 Department of Pediatric Cardiology  
 Cardiac Catheterization Laboratory

## Oxygen, Lotsa

MRN: 123  
 Birth Date: 01/01/2000  
 Cath Date: 05/22/2003  
 Cath #: 03c-0123  
 Age at cath: 3 years  
 Gender: Female

Attending: Allen D. Everett, MD  
 Fellow: Sara E. Regan, MD; Renee Friday, MD  
 Referring:

Height: 92.0 cm Weight: 12.0 kg  
 BSA = 0.55 m<sup>2</sup>

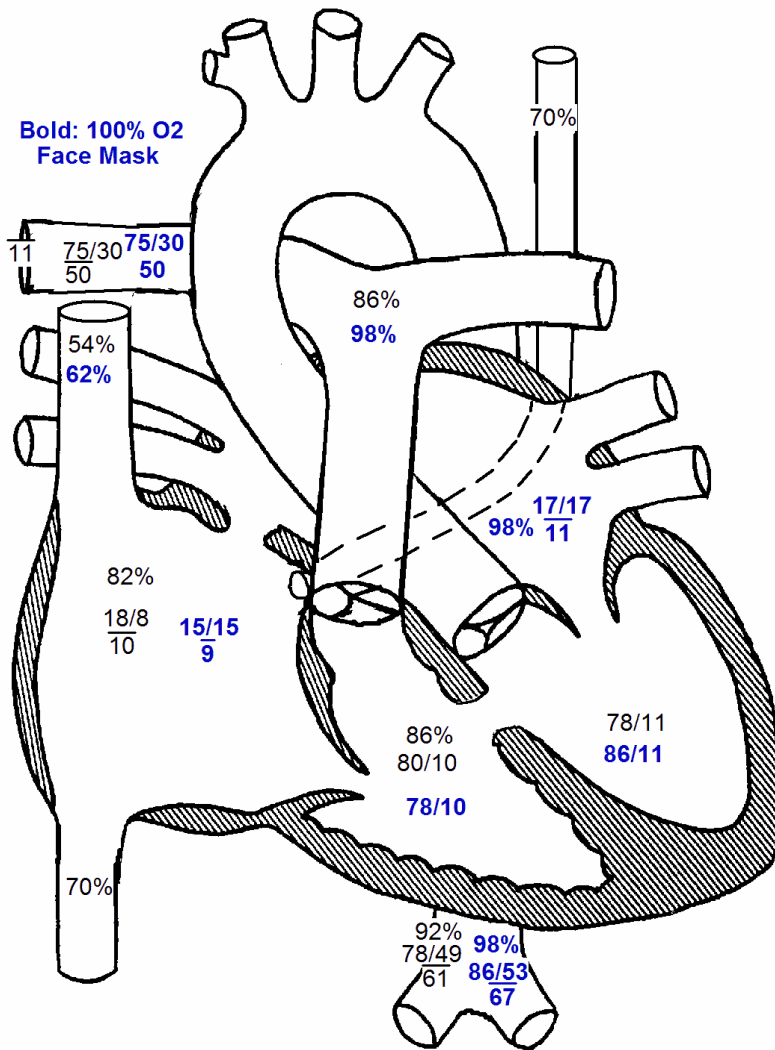
Fluoro: 11.40 min Contrast: 19.00 mL  
 Vein: Left Fem 5F  
 Artery: Right Fem 4F

### Room Air Rest

Qp = 5.51 L/min (10.03 L/min/m<sup>2</sup>)  
 Qs = 1.60 L/min (2.90 L/min/m<sup>2</sup>)  
 Rp = 7.07 units (3.89 units x m<sup>2</sup>)  
 Rs = 31.95 units (17.57 units x m<sup>2</sup>)  
 Qp/Qs = 3.45 : 1 | Rp/Rs = 0.22

### 100% oxygen by face mask

Qp = 38.21 L/min (69.47 L/min/m<sup>2</sup>)  
 Qs = 1.56 L/min (2.83 L/min/m<sup>2</sup>)  
 Rp = 0.92 units (0.50 units x m<sup>2</sup>)  
 Rs = 37.26 units (20.50 units x m<sup>2</sup>)  
 Qp/Qs = 24.55 : 1 | Rp/Rs = 0.02



Arrows indicate catheter course.

### Diagnoses / Procedures

- 130. VSD, perimembranous
- 20. ASD, secundum
- 176. Secondary pulmonary hpn.
- 79. Persist. L SVC

### Comments

1. Pulmonary vasculature responsive to oxygen therapy with an increase in the left to right shunt without a significant drop in pulmonary pressure.
2. Abnormal, but not stenotic mitral valve.





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## Oxygen, Lotsa

MRN: 123  
 Birth Date: 01/01/2000  
 Cath Date: 05/22/2003  
 Cath #: 03c-0123  
 Age at cath: 3 years  
 Gender: Female  
 Attending: Allen D. Everett, MD  
 Fellow: Sara E. Regan, MD; Renee Friday, MD  
 Referring:

Height: 92.0 cm Weight: 12.0 kg  
 BSA = 0.55 m<sup>2</sup>  
 Fluoro: 11.40 min Contrast: 19.00 mL  
 Vein: Left Fem 5F  
 Artery: Right Fem 4F

### Room Air Rest

Calculations:

$$\text{O}_2 \text{ capacity} = \text{HB} \times 1.36$$

$$17.95 = 13.2 \times 1.36$$

$$\text{MV O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{MV sat})$$

$$9.69 = (17.95 \times 0.54)$$

$$\text{SA O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{SA sat})$$

$$16.52 = (17.95 \times 0.92)$$

$$\text{PA O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{PA sat})$$

$$15.44 = (17.95 \times 0.86)$$

$$\text{PV O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{PV sat})$$

$$17.41 = (17.95 \times 0.97)$$

$$\text{Qp} = \text{O}_2 \text{ consumption} / ((\text{PV} - \text{PA content}) \times 10)$$

$$\text{Qs} = \text{O}_2 \text{ consumption} / ((\text{SA} - \text{MV content}) \times 10)$$

$$2.90 \text{ L/min/m}^2 = 198 / ((16.52 - 9.69) \times 10)$$

$$\text{Rp} = (\text{mean MPA} - \text{wedge}) / \text{Qp}$$

$$3.89 \text{ units} \times \text{m}^2 = (50 - 11) / 10.03 \text{ L/min/m}^2$$

(Wood's units x Meters<sup>2</sup>)

$$\text{Rs} = (\text{mean sys} - \text{mean RA}) / \text{Qs}$$

$$17.57 \text{ units} \times \text{m}^2 = (61 - 10) / 2.90 \text{ L/min/m}^2$$

(Wood's units x Meters<sup>2</sup>)

Dissolved oxygen not calculated.

Values used:

MV sat = 54  
 PA sat = 86  
 Mean MPA = 50  
 Mean Sys = 61  
 HB = 13.2

PV sat = 97  
 SA sat = 92  
 Wedge = 11.0  
 Mean RA = 10  
 BSA = 0.55 m<sup>2</sup>  
 O<sub>2</sub> consumption = 198 mL/Min/m<sup>2</sup>

### Room Air Rest

Qp = 5.51 L/min (10.03 L/min/m<sup>2</sup>)  
 Qs = 1.60 L/min (2.90 L/min/m<sup>2</sup>)  
 Rp = 7.07 units (3.89 units x m<sup>2</sup>)  
 Rs = 31.95 units (17.57 units x m<sup>2</sup>)  
 Qp/Qs = 3.45 : 1 | Rp/Rs = 0.22  
 Heart Rate: 150 bpm  
 VO<sub>2</sub>: 198 ml/min/m<sup>2</sup>  
 Hemoglobin: 13.2 gm/dL

Inspired O<sub>2</sub>: 30%  
 pH: 7.35  
 pCO<sub>2</sub>: 38.0  
 pO<sub>2</sub>: 75.0  
 HCO<sub>3</sub>: 20.0

Thermo CO:

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
54	SVC			
82	RA	18	8	10
86	RV	80	10	
86	PA			
	RPA	75	30	50
	LPA			

Right	Left
11	Wedge Mean

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
	LA			
	LV	78	11	
	aAO			
92	dAO	78	49	61

IVC: O<sub>2</sub> %: 70  
 Mean: 7  
Femoral Artery: O<sub>2</sub> %: 99  
 Sys/A: 108 Dias/V: 72 Mean: 80  
Left SVC: O<sub>2</sub> %: 70  
 Mean: 8



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 Cath #: 03c-0123  
 Age at cath: 3 years  
 Gender: Female

Attending: Allen D. Everett, MD  
 Fellow: Sara E. Regan, MD; Renee Friday, MD  
 Referring:

Height: 92.0 cm Weight: 12.0 kg  
 BSA = 0.55 m<sup>2</sup>

Fluoro: 11.40 min Contrast: 19.00 mL  
 Vein: Left Fem 5F  
 Artery: Right Fem 4F

### 100% oxygen by face mask

Calculations:

$$\text{O}_2 \text{ capacity} = \text{HB} \times 1.36$$

$$17.95 = 13.2 \times 1.36$$

$$\text{MV O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{MV sat}) + (.003 \times \text{MV PO}_2)$$

$$11.24 = (17.95 \times 0.62) + (.003 \times 38.0)$$

$$\text{SA O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{SA sat}) + (.003 \times \text{SA PO}_2)$$

$$18.24 = (17.95 \times 0.98) + (.003 \times 216.0)$$

$$\text{PA O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{PA sat}) + (.003 \times \text{PA PO}_2)$$

$$17.96 = (17.95 \times 0.98) + (.003 \times 121.0)$$

$$\text{PV O}_2 \text{ content} = (\text{O}_2 \text{ capacity} \times \text{PV sat}) + (.003 \times \text{PV PO}_2)$$

$$18.24 = (17.95 \times 0.98) + (.003 \times 216.0)$$

$$\text{Qp} = \text{O}_2 \text{ consumption} / ((\text{PV} - \text{PA} \text{ content}) \times 10)$$

$$\text{Qs} = \text{O}_2 \text{ consumption} / ((\text{SA} - \text{MV} \text{ content}) \times 10)$$

$$2.83 \text{ L/min/m}^2 = 198 / ((18.24 - 11.24) \times 10)$$

$$\text{Rp} = (\text{mean MPA} - \text{wedge}) / \text{Qp}$$

$$0.50 \text{ units} \times \text{m}^2 = (46 - 11) / 69.47 \text{ L/min/m}^2$$

(Wood's units x Meters<sup>2</sup>)

$$\text{Rs} = (\text{mean sys} - \text{mean RA}) / \text{Qs}$$

$$20.50 \text{ units} \times \text{m}^2 = (67 - 9) / 2.83 \text{ L/min/m}^2$$

(Wood's units x Meters<sup>2</sup>)

PO<sub>2</sub>:

MV PO<sub>2</sub> = 38.0  
 PA PO<sub>2</sub> = 121.0  
 PV PO<sub>2</sub> = 216.0  
 SA PO<sub>2</sub> = 216.0

Values used:

MV sat = 62  
 PA sat = 98  
 Mean MPA = 46  
 Mean Sys = 67  
 HB = 13.2

PV sat = 98  
 SA sat = 98  
 Wedge = 11.0  
 Mean RA = 9  
 BSA = 0.55 m<sup>2</sup>  
 O<sub>2</sub> consumption = 198 mL/Min/m<sup>2</sup>

### 100% oxygen by face mask

Qp = 38.21 L/min (69.47 L/min/m<sup>2</sup>)  
 Qs = 1.56 L/min (2.83 L/min/m<sup>2</sup>)  
 Rp = 0.92 units (0.50 units x m<sup>2</sup>)  
 Rs = 37.26 units (20.50 units x m<sup>2</sup>)  
 Qp/Qs = 24.55 : 1 | Rp/Rs = 0.02

Heart Rate: 134 bpm  
 VO<sub>2</sub>: 198 ml/min/m<sup>2</sup>  
 Hemoglobin: 13.2 gm/dL

Inspired O<sub>2</sub>: 100%

pH: 7.36  
 pCO<sub>2</sub>: 38.0  
 pO<sub>2</sub>: 216.0  
 HCO<sub>3</sub>: 21.0

Thermo CO:

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
62	SVC			
	RA	15	15	9
	RV	78	10	
98	PA			
	RPA	72	28	46
	LPA			

Right	Left
Wedge Mean	

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
98	LA	17	17	11
	LV	86	11	
	aAO			
98	dAO	86	53	67

IVC: O<sub>2</sub> %: 90

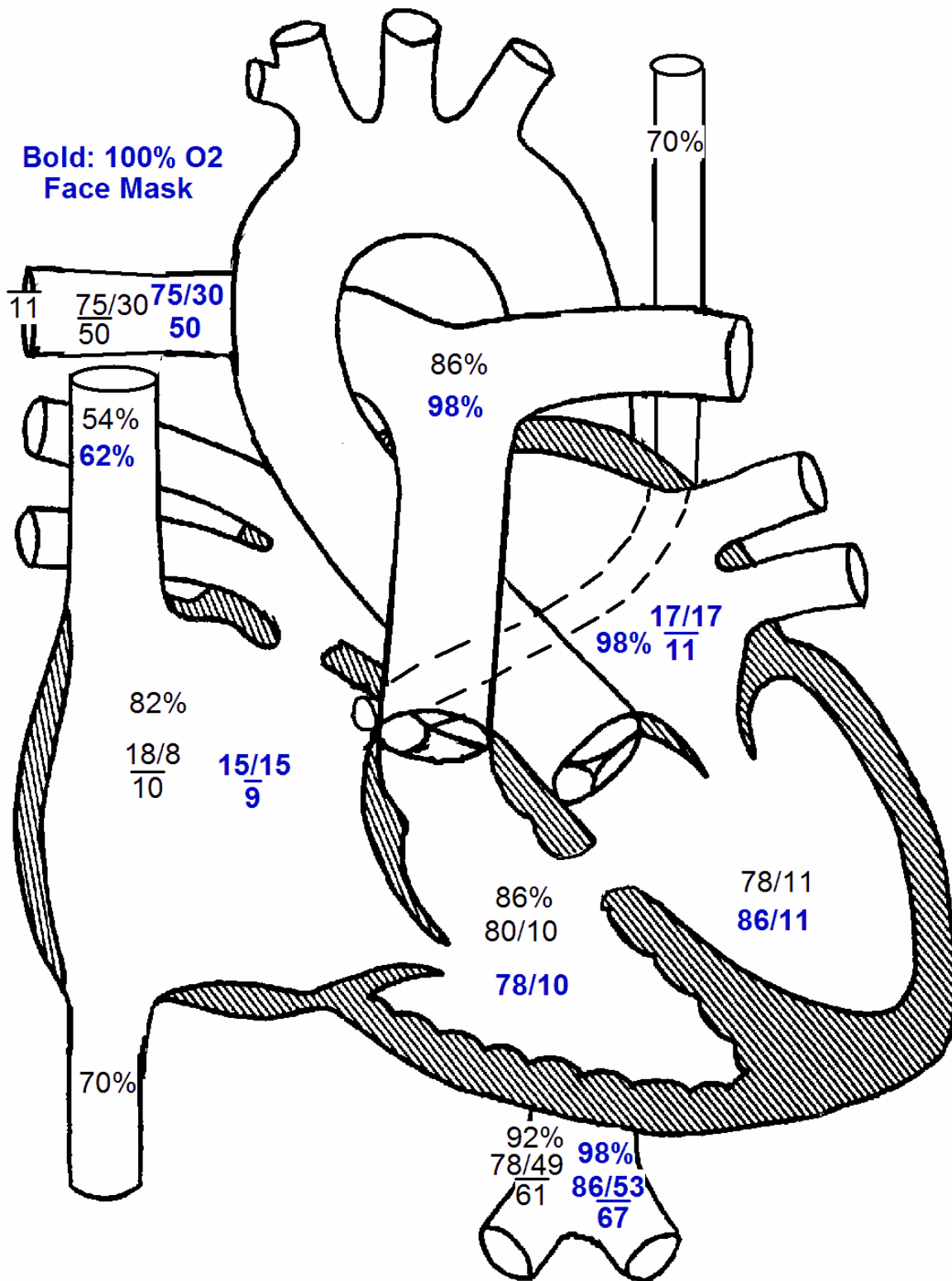
Mean: 10

Femoral Artery: O<sub>2</sub> %: 99

Sys/A: 107 Dias/V: 72 Mean: 80

Left SVC: O<sub>2</sub> %: 89

Mean: 9



Arrows indicate catheter course.



May 26, 2003

Adam Neal, M.D.  
123 Main St.  
Charlottesville, VA 22601

RE: Status of Lotsa Oxygen  
MRN: 123  
Visit Date: 05/22/03

Dear Dr. Neal,

I had the pleasure of taking care of your patient, Lotsa Oxygen today at the Virginia Children's Heart Center in Charlottesville, Virginia. As you know, she is a 3 year-old determined by echocardiography to have atrial and ventricular septal defects and an abnormal mitral valve. For these reasons, she underwent cardiac catheterization to determine her present hemodynamics and anatomy.

At the time of her cardiac cath, she was angiographically and hemodynamically noted to have a large perimembranous type ventricular septal defect. She has a large left-to-right shunt, and systemic pulmonary artery pressures. Hemodynamic evaluation of her mitral valve did not demonstrate significant mitral stenosis although her mitral valve is abnormal anatomically.

Lotsa has a large ventricular septal defect associated with pulmonary hypertension and a large left-to-right shunt. Although her pulmonary artery pressures are elevated, her vascular bed is reactive to changes with oxygen. She is presently at significant risk of developing irreversible pulmonary vascular obstructive disease. We have recommended her for surgical repair at the earliest possible date by my surgical colleague, Dr. Shelby. Her care is being coordinated by Dr. Sing, the inpatient attending, who would be happy to discuss any details with you further. Thank you for allowing us to participate in the care of this child. If you have any questions in the interim, please feel free to call.

Sincerely,

Allen D. Everett, M.D.

ADE:jp



UNIVERSITY OF VIRGINIA HEALTH SCIENCES CENTER

Cardiac Catheterization Charlottesville, VA 22908 (434) 924-2736  
Patient Name: Lotsa Oxygen Date of Birth: 01/01/2000 Age: 3 years  
S: F Date of Procedure: 05/22/2003 History #: 123 Cath #: 03c-0123  
Physician Performing Study: Allen D. Everett, MD Fellow: Sara E. Regan, MD

HISTORY

Lotsa Oxygen is a 3yo recently diagnosed by echocardiography with a ventricular septal defect, atrial septal defect and an abnormal mitral valve. She underwent cardiac catheterization to determine her present hemodynamics and anatomy.

PROCEDURE

The patient was sedated by the Pediatric Sedation Service. The patient was prepped and draped in the usual sterile fashion and both inguinal areas were infiltrated with 1% Xylocaine. Using percutaneous technique, a 5 French sheath was placed in the left femoral vein and a 4 french sheath in the right femoral artery. Through the arterial and venous sheaths, a right and transseptal left heart catheterization for congenital heart defects was performed. An innominate vein superior vena cava venogram was performed to demonstrate whether a left superior vena cava was present. A left ventricular cineangiogram was performed to demonstrate left ventricular function, size and the location and size of her ventricular septal defect. A right ventricular cineangiogram was performed to demonstrate the size of the right ventricle, patency of the tricuspid valve and the size of the pulmonary arteries. Hemodynamics were recorded both on room air and with 100% ambient oxygen. All catheters and sheaths were then removed, hemostasis was obtained by manual pressure and the patient returned to 7 West in stable condition.

ANGIOGRAPHIC DATA

1. An innominate vein venogram was performed in the AP projection. With injection, contrast was seen to fill a normal innominate vein with flow of contrast to a normal superior vena cava and right atrium. A left superior vena cava was present, draining via the coronary sinus to the right atrium.
2. A left ventricular cineangiogram was recorded in the RAO and LAO projections. With injection, contrast was seen to fill a finely trabeculated chamber that contracts well. With contraction, contrast was seen to flow across an unobstructed left ventricular outflow tract and immediately to opacify a large ventricular septal defect. The defect appears to be in the perimembranous location and is at least the size of the aortic root. The aortic arch is leftward.
3. A right ventricular cineangiogram was recorded in the AP and lateral projections. With injection, contrast was seen to fill a dilated, coarsely trabeculated chamber that contracts well. With contraction, contrast was seen to flow across an unobstructed right ventricular outflow tract and to opacify a dilated main pulmonary artery. The peripheral pulmonary vascular pattern appears grossly normal. On pulmonary venous recirculation, contrast was seen to return by normal pulmonary veins to the left atrium. There is obvious flow of contrast from the left atrium to the right atrium that even refluxes into the hepatic veins.

DISPOSITION

Lotsa has large atrial and ventricular septal defects with a large left-to-right shunt. She also has associated moderate to severe pulmonary hypertension that is only mildly improved with oxygen. I have forwarded this information to Dr. Johns, the inpatient attending who will be coordinating early surgical repair for Lotsa with our surgical colleague, Dr. Smith, in the next few days.

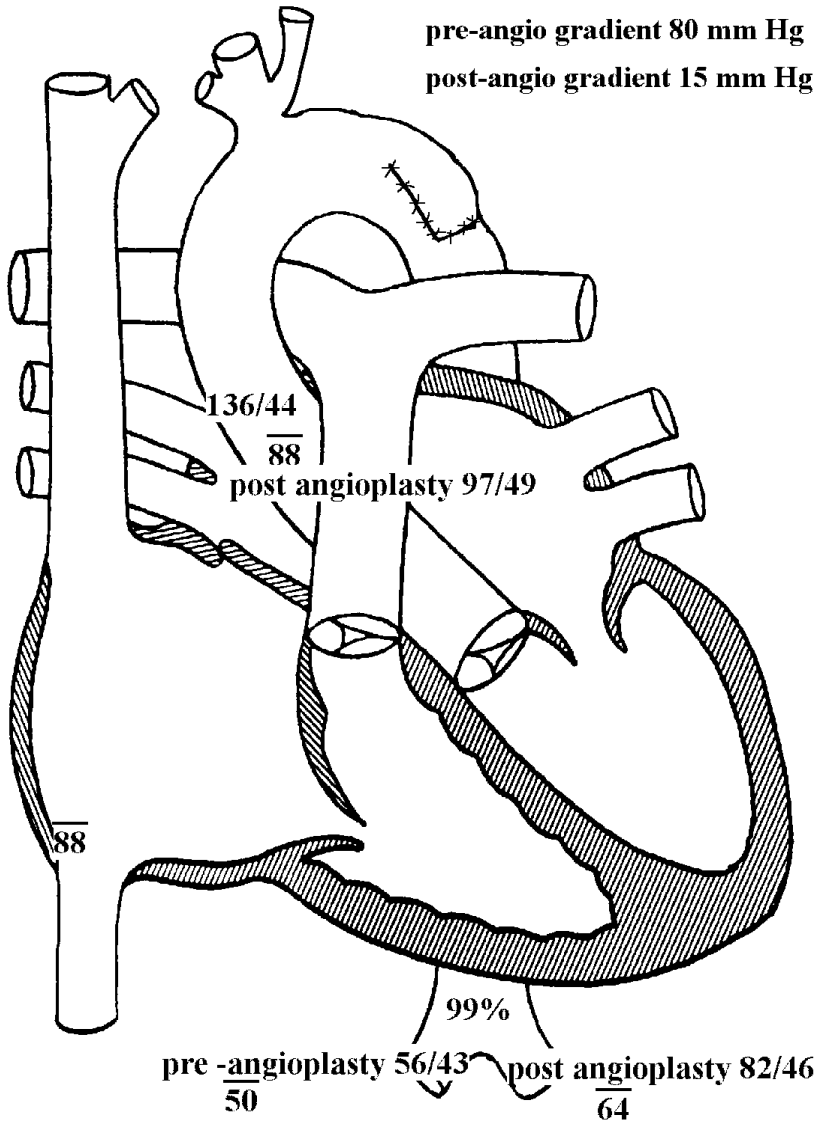
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Allen D. Everett, MD  
Attending  
Pediatric Cardiology  
ADE/jp D: 05/22/03 T: 05/26/03



**Plastie, Angela**

MRN: BB518  
 Birth Date: 12/12/1998  
 Cath Date: 02/28/1999  
 Cath #: jj-19981  
 Age at cath: 2 months  
 Gender: Female  
 Attending: Allen D. Everett, MD  
 Fellow: Renee Friday, MD  
 Referring:  
 Height: 60.0 cm Weight: 4.0 kg  
 BSA = 0.25 m<sup>2</sup>  
 Fluoro: 7.00 min Contrast: 20.00 mL  
 Vein: None  
 Artery: 5F changed to a 6F



Arrows indicate catheter course.

Diagnoses / Procedures

- 568. Balloon angioplasty AO
- 672. Coarctation repair, SF

Comments

Coarctation of the aorta s/p subclavian flap repair with re-coarctation  
 S/P balloon angioplasty with 6 and then 8 mm balloon.  
 The stenosis measured 2mm, the transverse arch 6.5 mm and the descending aorta 7.75 mm  
 Initial AAO to DAO gradient 80 mmHG, post andioplasty 15 mmHG

Pre-Angioplasty

Qp =  
 Qs =  
 Rp =  
 Rs =  
 Qp/Qs = | Rp/Rs =  
 Heart Rate: 130 bpm  
 VO2: 148 ml/min/m<sup>2</sup>  
 Hemoglobin: 9.0 gm/dL  
 Inspired O2: 21%  
 pH: 7.44  
 pCO2: 37.0  
 pO2: 196.0  
 HCO3: 24.0  
 Thermo CO:

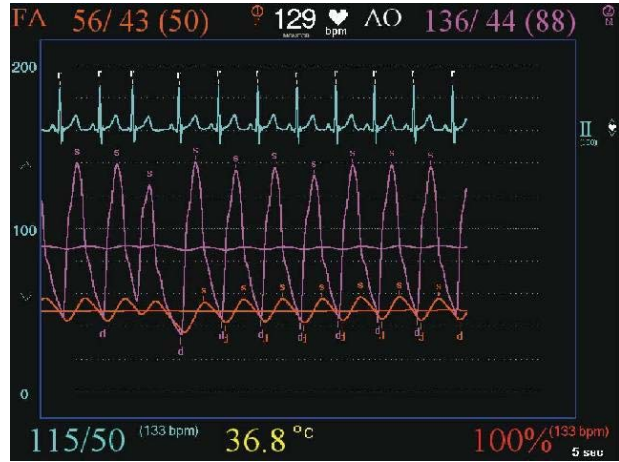
%O2	Site	Sys/A	Dias/V	Mean
	SVC			
	RA			
	RV			
	PA			
	RPA			
	LPA			

Right	Left
Wedge Mean	

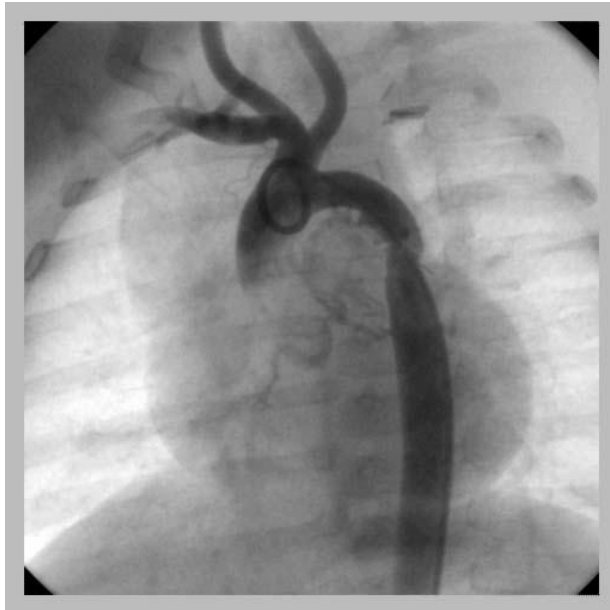
%O2	Site	Sys/A	Dias/V	Mean
	LA			
	LV			
	aAO	136	44	88
99	dAO	56	43	50



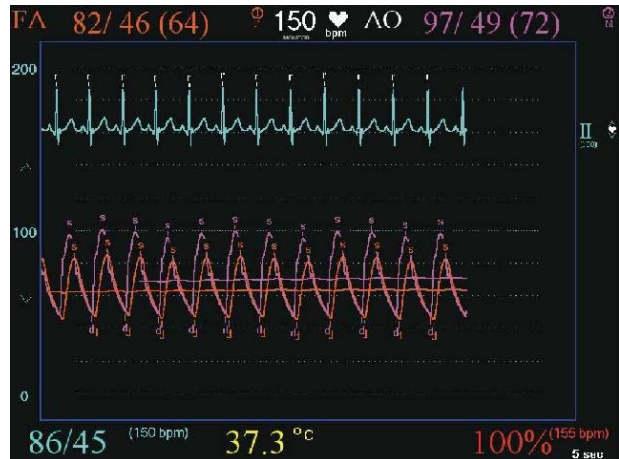
Aorta pre-angioplasty, gradient 80 mm



AAO & FA pressures, pre-angioplasty



Aorta post-angioplasty, gradient 15 mmH



AAO & FA pressures, post-angioplasty



# National Cardiovascular Center

Osaka, Japan  
 Department of Pediatric Cardiology  
 Cardiac Catheterization Laboratory

## Rogers, Buck

MRN: 1285656  
 Birth Date: 09/23/1995  
 Cath Date: 09/27/1995  
 Cath #: fr445  
 Age at cath: 4 days  
 Gender: Male

Attending: Allen D. Everett, MD  
 Fellow: Heller MD, Felice  
 Referring: Matherne MD, Paul

Height: 73.9 cm Weight: 9.8 kg  
 BSA = 0.43 m<sup>2</sup>

Fluoro: 0.00 min Contrast: 0.00 mL  
 Vein: 5 fr rt  
 Artery: 4 fr rt

### status-post Art. Switch

Qp = 2.61 L/min (6.07 L/min/m<sup>2</sup>)  
 Qs = 2.61 L/min (6.07 L/min/m<sup>2</sup>)  
 Rp = 1.53 units (0.66 units x m<sup>2</sup>)  
 Rs = 26.43 units (11.37 units x m<sup>2</sup>)  
 Qp/Qs = 1.00 : 1 | Rp/Rs = 0.06

Heart Rate: 85 bpm  
 VO<sub>2</sub>: 198 ml/min/m<sup>2</sup>  
 Hemoglobin: 10.9 gm/dL

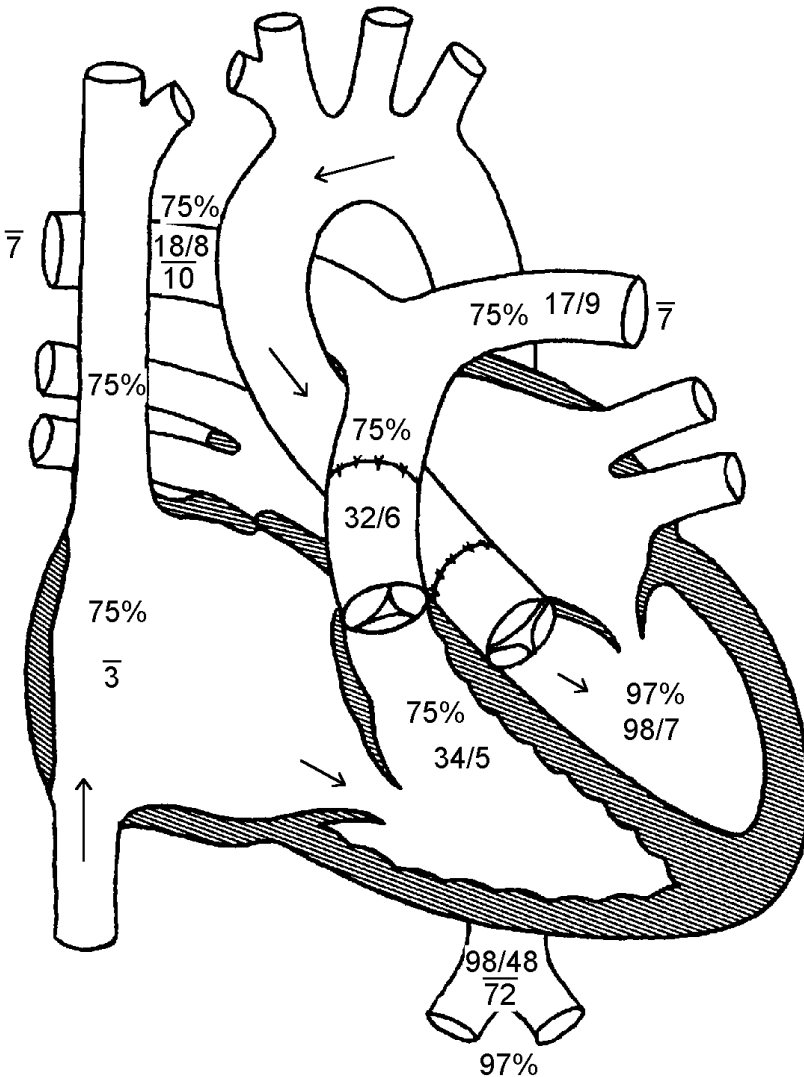
Inspired O<sub>2</sub>: 21%  
 pH: 7.35  
 pCO<sub>2</sub>: 40.0  
 pO<sub>2</sub>: 108.0  
 HCO<sub>3</sub>: 22.0

Thermo CO:

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
75	SVC			
75	RA			3
75	RV	34	5	
75	PA	32	6	11
75	RPA	18	8	10
75	LPA	17	9	11

Right	Left
7	7

%O <sub>2</sub>	Site	Sys/A	Dias/V	Mean
97	LA			
97	LV	98	7	
	aAO			
97	dAO	98	48	72



Arrows indicate catheter course.

### Diagnoses / Procedures

- 112. Transposition of the Great Arteries
- 722. Arterial switch
- 86. Supravalvular Pulmonary Stenosis

### Comments

Normal left ventricular function