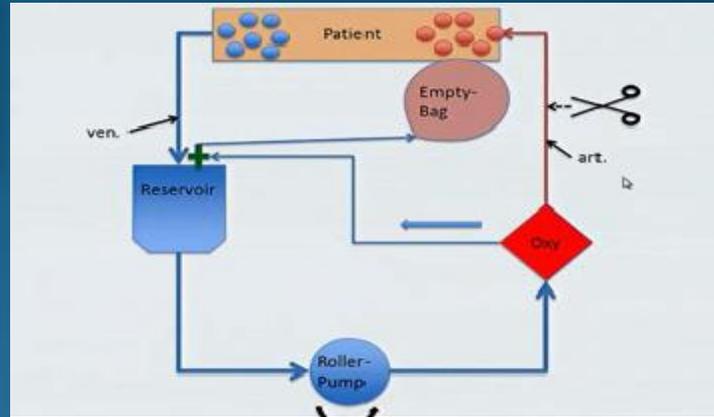


Retrograde autologous blood priming is an efficient technique for without or minimally usage of blood infant cardiosurgery.

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Leading question

Is it possible to reduce the need for intra- and postoperative blood transfusion during infant cardiac surgery?



Variables

CPB time, min	36,7±14,6
Aortic clamp time, min	22,3±12,7
Temperature media °C	34,4±1,6
Media minimal pH	7,36±0,12
Media minimal BE	- 3,5±1,8
Lactate during operation	1,6+,-0,5
Arterial saturation media %	99±0,1
Hemoglobina media minimal, g/l	7,8
Hematocrite media minimal %	21

Patients and doctors

- 250 children with congenital heart disease
- Weight 20,45 ± 3,15 kg
- Age 3,4 ± 1,7 years
- Gender m/f 131/119
- No major complications of death
- Surgeons, anesteziologists and perfuzionist were the same
- Anaesthetic and haemodynamic management were similar

Results

- With using Retrograde and Antegrade Autologous Blood Priming (RAP) was recuperated till 45% of standart "priming" from 430 ml to 195 ml.
- No reoperation for hemorrhage
- No major neurologic complications!

Variables	RAP
"Priming" recuperated, media, ml	123±70,6
Blood loss in ICU, ml/kg / 24 h	6,2±3,8
Red blood Cell transfusion, media, hospital stay (ml)	287,3±25,6
ICU, days	1,85±1,01
Mechanical ventilation, media, hours	17,1±2,2

Discussion

- Effective Methods for bloodless infant cardiosurgery:
- RAP
- Modified ultrafiltration
- Ineffective methods for infant cardiosurgery?
- Cell Saver
- Autotransfusion

Is Retrograde and Antegrade Autologous Blood Priming safely, low cost method ?

Yes!

