Results

Conclusions

The incidence of post bypass AKI at our institution has decreased in pediatric patients undergoing CPB. Adding furosemide to aminophylline has decreased AKI without an increase in urine output cc/hg.

Increased awareness of the problem has also played an important but non-measured role. Having a rapid biomarker of AKI would be beneficial. Our target is an AKI incidence of less than 5%.

Discussion

Renal Medulla has high oxygen requirement with relatively low perfusion on CPB.

Modula is sensitive to impaired RDO as assessed by renal tubular injury markers.

RDO decreases significantly after 30 min on CPB.

On bypass RBF/C1 ratio decreases by 25%.

Renal oxygen extraction decreases after on bypass.

Renal O2 supply/demand mismatch started on CPB is further aggravated post CPB.

All points to neuro-humeral causes of AKI.

NAG may be a better biomarker of AKI than NGAL.

References


