

Less Is More in Post Pediatric Heart Transplant Care

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Objective: Steroids have been standard immunosuppression in preventing cardiac transplantation rejection. Similarly, endomyocardial biopsies monitor rejection. Each of these comes with risks/costs, and may actually interfere with recovery. Transplant programs have begun to question if the cost and risks of these treatments outweigh benefits, or if new technology and methods are sufficient. Herein, we describe our experience with gradually eliminating steroid and biopsy use in pediatric heart post-transplant care.

Methods: Retrospective study examining outcomes of pediatric cardiac transplantations over the last 15 years at this institution (n=34, mean age = 6.3 (±7.2) years, survival=82.4%). Patient records were used to examine effectiveness of treatment. New protocol patients have slightly less follow-up time due to gradual adoption.

Results: Rejection was adequately discovered with or without surveillance biopsy. P-value statistics suggest that there is no significant difference between survival or rejection rates between groups of patients. Steroid avoidant patients exhibited no significant rejection. Most notably, 5 total patients exhibited moderate-severe rejection, and all had >3 weeks steroid treatment immediately post-transplant. P-values suggest no indication of higher rejection rates or lower survival between groups.

Conclusion: Study suggests these minimalistic treatments can be implemented safely and effectively.

	Endomyocardial Biopsy		Steroid Treatment		Combined Overall
	YES	NO	YES	NO	
Number of Patients	12	22	21	22	34
Survival	75.0%	86.4%	76%	86.4%	82.4%
	<i>p-value = 0.46</i>		<i>p-value = 0.87</i>		
Rejection	66.7%	9.1%	42.9%	7.70%	29.4%
	<i>p-value = 0.01</i>		<i>p-value = 0.89</i>		
Years of Post-Op Follow-Up Care (SD)	6.8 (±4.1)	5.1 (±5.0)	7.7 (±4.5)	1.6 (±1.7)	5.6 (±4.7)

