



OUTCOME OF DISMEMBERED PYELOPLASTY FOR POORLY FUNCTIONING KIDNEYS IN CHILDREN: A SYSTEMATIC REVIEW AND META-ANALYSIS



Lipana, KA.; Pahati, MP
Philippine Children's Medical Center

Introduction

Ureteropelvic junction obstruction (UPJO) is a condition where there is blockage from the upper to lower urinary collecting system. goal of surgery is preservation of renal function however, if renal function is poor, management becomes controversial. there is no conclusive evidence regarding the relation of preoperative against post-surgical differential renal function.

Methods

THIS IS A SYSTEMATIC REVIEW AND META-ANALYSIS. THE PRIMARY OUTCOME MEASURES WERE THE BASELINE AND POSTOPERATIVE DIFFERENTIAL RENAL FUNCTION AND THE POSTOPERATIVE COMPLICATIONS FOLLOWING SURGERY.

Results

There were a total of 5 articles for quantitative and qualitative analysis. There was noticeable improvement in differential renal function with poorly functioning kidney secondary to UPJO after dismembered pyeloplasty. This is comparable to impaired functioning kidneys secondary to UPJO. There were no significant differences in postoperative complications between the these groups.

Impact of dismembered pyeloplasty on differential renal function according to baseline

Study	Subgroup by differential renal function	N per subgroup	Mean Differential renal function	
			Baseline	After surgery
Kapoor et. Al.	<10	13	4.37	13.38
	10-20	20	15.24	26.83
Menon et. Al.	<10	40	3.16	18.46
	10-20	62	14.84	23.71
Rudwawadi et. Al.	<10	26	7.58	29.71
	10-30	54	20.81	37.25
Wagner et. Al.	<10	4	7.0	36.5
	10-40	7	29.14	38.5

Discussion

Postoperative outcomes of pediatric patients with UPJO who underwent dismembered pyeloplasty are the same between preoperative poorly functioning kidneys and impaired functioning kidneys. pyeloplasty should be offered to patients with UPJO irrespective of the preoperative function as good overall recovery may be seen in these patients.

Keywords

Split renal function, dismembered pyeloplasty, poorly functioning kidney, ureteropelvic junction obstruction