

USE OF STANDARDIZED VISUAL AIDS IMPROVES INFORMED CONSENT FOR APPENDECTOMY IN CHILDREN: A RANDOMIZED CONTROL TRIAL

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Category: Education

Background

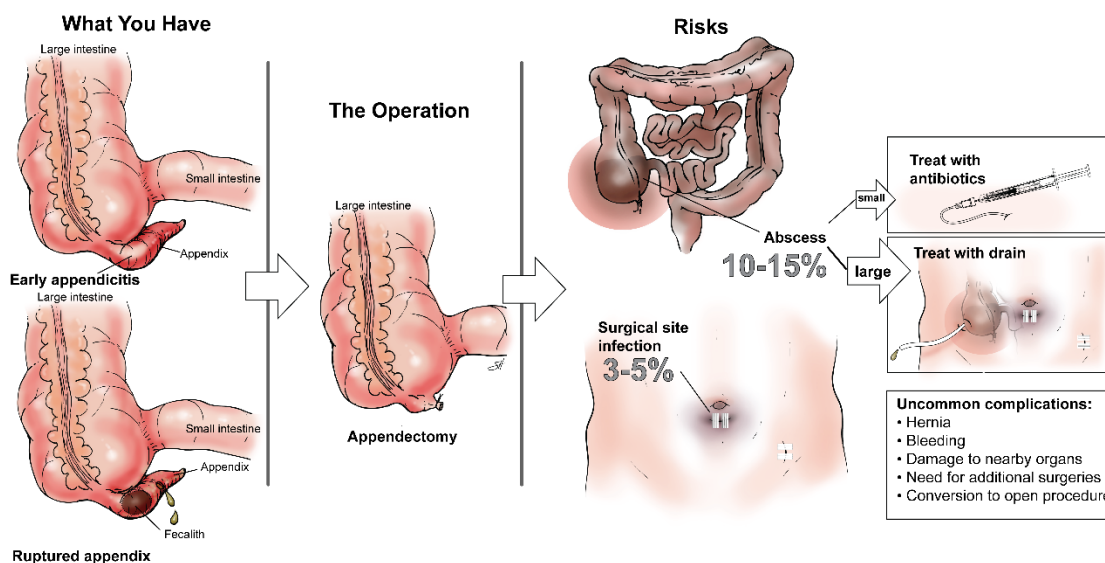
Obtaining informed consent for surgical procedures is often compromised by patient and family educational background, complexity of the forms, and language barriers.

Objectives

We developed and tested a visual aid in order to improve the informed consent process for children with appendicitis

Methods

Families were randomized to receive either a standard surgical consent or a standard consent plus visual aid. Univariate and multivariate analyses were performed to assess the effectiveness of adding the visual aid to the consent procedure.



Results

Parents in both cohorts were similar in age, gender and education level ($p > 0.05$). On multivariate analysis, visual consent had the strongest influence on parent/guardian comprehension (OR 4.0; 95%CI 2.2-7.2; $p < 0.01$), followed by post-secondary education (OR 2.7; 95%CI 1.5-4.9; $p < 0.01$), and use of external resources to look up appendicitis (OR 2.0; 95%CI 1.1-3.6; $p = 0.02$). Self reported comprehension did not correlate with assessment based test scores.

Discussion

Visual aids improve understanding and retention of information given during the informed consent process in children with appendicitis.

Table 1- Baseline Characteristics of Cohorts

Baseline Characteristics				
	Sub-Category	Visual Consent Cohort (n=76)	Standard Consent Cohort (n=84)	P-Value
Parent/Guardian Age Group	40+	38% (29)	36% (30)	0.75
	35-39	32% (24)	26% (22)	
	30-34	20% (15)	25% (21)	
	25-29	7% (5)	8% (7)	
	20-24	4% (3)	2% (2)	
	15-19	0% (0)	2% (2)	
Survey Administered in Native Language		96% (73)	93% (78)	0.38
Parent/Guardian Education Level	Professional or graduate degree	9% (7)	8% (7)	0.24
	College degree	26% (20)	16% (13)	
	Vocational school or some college	20% (15)	23% (19)	
	High school diploma/GED	34% (26)	31% (26)	
	Did not finish high school	11% (8)	22% (18)	
Relationship of Person Completing Survey	Mother	87% (66)	81% (68)	0.58
	Father	12% (9)	15% (13)	
	Guardian	1% (1)	4% (3)	

Table 2- Univariate Analysis

Effect on Knowledge Based Assessment Scores			
	Yes	No	P-Value
Visual Consent*	3 (2-4)	2 (1-3)	<0.01
Post-Secondary Education*	3 (2-4)	2 (1-3)	<0.01
Did you use External Resources to Look up Appendicitis*	3 (2-4)	2 (1-3)	<0.01
Survey Administered in Native Language*	2 (1-4)	2 (1-3)	0.60
Consenter; (Resident vs Physician Assistant) *	2 (1-4)	3 (2-4)	0.19
Patient Reported Comprehension of the Procedure*	2 (1-3)	2 (1-4)	0.73
Gender of Survey Respondent, male*	2 (1-4)	2 (1-4)	0.87
*Median (IQR); Maximum knowledge-based assessment score is 4			

Table 3- Multivariate Analysis

Ordinal Logistic Regression Estimates			
	Estimate (Odds)	95% Confidence Interval	P-Value
Visual Consent	4.0	2.2-7.2	<0.01
Post-Secondary Education	2.7	1.5-4.9	<0.01
Use of External Resources	2.0	1.1-3.6	0.02