

Efficacy of
LAPAROSCOPIC CHOLECYSTECTOMY
for the treatment **BILIARY DYSKINESIA**
in the **PEDIATRIC POPULATION**



THE UNIVERSITY of
TENNESSEE 
GRADUATE SCHOOL
OF MEDICINE

Sabina Siddiqui, MD
Scott Newbrough, MD
Daniel Alterman, MD
Alfred Kennedy, MD
Alan Anderson, MD



PURPOSE

- Chronic abdominal pain affects 9-15% of pediatric patients¹
- Diagnosis of biliary disease has increased²
 - Acalculous biliary disease by 348%
 - Acute acalculous cholecystitis by 139%
 - Chronic acalculous cholecystitis 138%
 - Number of biliary disease diagnoses in pediatrics has tripled³
- Number of cholecystectomies have increased
 - Adults 618 → 800 (29%)²
 - Pediatrics ()³
- Is this intervention efficacious?

1. Ramchandani, PG, Hotopf, M, Sandhu, B, Stein, A. The epidemiology of recurrent abdominal pain from 2 to 6 years of age: results of a large, population-based study. *Pediatrics* 2005; 116:46.
2. Johannig, JM, Gruenberg JC. The changing face of cholecystectomy. *Am Surgeon*. 1998, 64; 647-8
3. Wang G, Dietz WH: Economic Burden of Obesity in Youths Aged 6-17: *Pediatrics* 2002; 109; 81-6



METHODS

- IRB approval
- Retrospective review of patient charts
- Correlated with diagnosis and degree of biliary dyskinesia
 - BD defined as ultrasonography without evidence of cholelithiasis with clinical symptoms of biliary colic
 - HIDA scan: performed in dynamic fashion over 75 minutes with injection 1 mg of CCK at 45 minutes. EF <35% considered abnormal
- Telephone interview conducted by scripted categorical questions
- Data Analyzed using chi square test

RESULTS

■ Pathology and Postoperative Outcomes

Path	Post Cholecystectomy Outcomes			(n)
	Resolved	Improved	Failure	
Chr cholecystitis	64.3%	28.5%	7.1%	42
Mild chr cholecystitis	68.6%	23.5%	7.8%	51
Min chr cholecystitis	50%	37.5%	12.5%	8
Normal gallbladder	50%	50%	-	2
No gallbladder	100%	-	-	1
Cholelithiasis	100%	-	-	2

$p > 0.5$