CASE REPORT

Symptomatic Cholilithiasis and Cholecystectomy for a 9-Month-Old Infant: A Case Report

Hailu Wondimu*

ABSTRACT

BACKGROUND: Symptomatic cholilithiasis is rare in children. Thus, a high degree of suspicion is required for diagnosis. Once a child is diagnosed with symptomatic cholilithiasis, cholecystectomy is required to relieve the symptoms and prevent complication.

CASE DETAILS: A 9-month-old infant from Addis Ababa presented to the Pediatric Department of Zewditu Memorial Hospital on January 30, 2015 with irritability, abdominal pain. On workup, she was found to have gall stones, and her condition was last attributed to biliary colic after months of follow-up in the Department of Pediatrics. She underwent cholecystectomy on the 31st of July 2015 and discharged with improved results. This is the first report of symptomatic cholilithiasis and cholecystectomy in Ethiopia at 9 months of age.

CONCLUSION: Cholilithiasis is rare in infants, and one should have a high index of suspicion for diagnosis. Cholecystectomy should be done as in adults if symptomatic

KEYWORDS: Infant, symptomatic, cholilithiasis, cholecystectomy

INTRODUCTION

Cholilithiasis is the presence of gall stones in the gall bladder. Patients with uncomplicated gallstone disease typically present with biliary colic which is of an intense, dull discomfort located in the right upper quadrant, epigastrium, or (less often) sub-sternal area that may radiate to the back (particularly the right shoulder blade)(1). Age is a major risk factor for gallstones. Gallstones are exceedingly rare in children except in the presence of hemolytic states representing around than 1% of all cases (1).

Children with Cholilithiasis may present with colicky pain and jaundice, but most are asymptomatic (2). Predisposing conditions for Cholilithiasis in children include phototherapy during neonatal period, parenteral hyper alimentation, prior ileal resection, hemolytic disorders and biliary tract abnormalities (3). Cholecystectomy, preferably laparoscopic, is recommended in symptomatic cases(4).
CASE PRESENTATION

A 9-month-old infant presented with irritability, colicky abdominal pain of 5 months [since the age 4 months], and was followed up in the Department of Pediatrics of Zewditu Memorial Hospital. She was crying intensely and periodically curled her legs up.

Her symptoms were attributed to on various occasions. Among differentials considered were gastroenteritis, urinary tract infection and even acute abdomen due to intussusception and were given various medications.

She was born at term with a birth weight of 2000 grams. She was the 3rd child for the family. There was no history of jaundice or phototherapy. There was no known gallstone disease hereditary condition in the family or immediate relatives. There were no history of admissions to a hospital and injections prior to her follow-up in Zewditu Memorial Hospital.

On Physical examination, she was sick looking but in no form of cardiorespiratory distress, weighing 6 kg and having a height of 67 cm, that made her weight for length on 0.1 percentile [underweight]. The only pertinent abnormal finding was slight pallor, and there were no tenderness or mass on the abdominal examination.

Investigations showed anemia with Hypochromic, anisocytotic and macrocytic RBCs dominating peripheral smear, but reticulocyte count was normal [1.2%]. The blood groups of the infant and the mother were AB positive and A positive respectively. Urine analysis revealed WBCs, but culture did not yield bacteria.

Ultrasound examination done on four occasions since the age of 4 all showed cholelithiasis. However, there was no evidence of cholecystitis or common bile duct stone.

After thorough evaluation and interdepartmental discussion symptomatic cholelithiasis was diagnosed and cholecystectomy done. Then, the patient was discharged with no complication. On her first follow-up, the mother claims that the infant started sleeping well with no irritability after surgery.

DISCUSSION

Gallstones constitute a significant health problem in developed societies, affecting 10% to 15% of the adult population. The prevalence in sub-Saharan Africa is estimated to be less than 5%. The majority [up to 80%] will not develop symptoms of cholelithiasis nor develop complications such as acute cholecystitis, cholangitis, or pancreatitis etc. (5).

The female gender has a most compelling association with gallstone disease, especially

DOI: http://dx.doi.org/10.4314/ejhs.v27i3.13
Symptomatic Cholilithiasis and Cholecystectomy…

Hailu W.

REFERENCES

1. Nezam H. Epidemiology of and risk factors for gallstones. In: S C, editor. UpToDate 213 [Internet]. ©2013 UpToDate; 2013. Available from: http://www.uptodate.com

2. Wesdorp I, Bosman D, Graaff A De, Blij F Van Der, Taminiou J. Clinical Presentations and Predisposing Factors of Cholelithiasis and Sludge in Children. J Pediatr Gastroenterol Nutr. 2000;31:411–7.

3. Lopez ME, Chumpitazi BP, Mazziotti M V, Brandt ML, Fishman DS. Clinical Characteristics and Risk Factors for Symptomatic Pediatric Gallbladder Disease. Pediatr Am Acad Pediatr [Internet]. 2012;129:84–95.

4. Road R, Pradesh U. Gallstone Disease in Children. INDIAN Pediatr. 2010; 47:945–54.

5. Stinton LM, Shaffer EA. Epidemiology of Gallbladder Disease: Cholelithiasis and Cancer. Gut Liver. 2012;6(2):172–87.

6. Dooki ME, Norouzi A. Cholelithiasis in Childhood: A Cohort Study in North of Iran. Iran J Pediatr. 2013;23(5):588–92.

7. Herzog D, Bouchard G. High rate of complicated idiopathic gallstone disease in pediatric patients of a North American tertiary care center. World J Gastroenterol. 2008;14(10):1544–8.

8. R. Darko et al. gallstone dis in ghana.pdf. WAJM. 2005;24(4):295–9.

9. Bai A, Za K, Ibnouf G, Ao M, Abdelwahab O, Nasir EM, et al. Outcome of cholelithiasis in Sudanese children with Sickle Cell Anaemia (SCA) after 13 years follow-up. Afr Health Sci. 2013;13(1):154–56.

10. Triunfo S, Rosati P, Ferrara P, Gatto A, Scambia G. Clinical Medicine Insights : Case Reports Fetal Cholelithiasis: A Diagnostic Update and a Literature Review. :153–8.

11. Miltenburg DM, Breslin T, Brandt ML. Changing Indications for Pediatric Cholecystectomy. Pediatrics [Internet]. 2015;105(6):1250-3.

12. Kennedy AM, Editor C, Cuffari C. Pediatric Gallstones (Cholelithiasis) Clinical Presentation[Internet].emedicine.medscape.com/article/927522_clinical. 2015. p. 1–3.

DOI: http://dx.doi.org/10.4314/ejhs.v27i3.13
Available from: http://emedicine.medscape.com/article/927522clinical

13. Gowda DJ, Agarwal P, Bagdi R, Subramanian B, Kumar M, Ramasundaram M. Laparoscopic cholecystectomy for cholelithiasis in children. *J Indian Assoc Pediatr Surg*. 2015;14(4):204–6.