CRITICAL ANALYSIS OF BILIARY ATRESIA PATIENTS SURVIVING WITH NATIVE LIVERS FOR MORE THAN 3 YEARS AFTER LAPAROSCOPIC PORTOENTEROSTOMY

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Aim of the Study: We reviewed our biliary atresia (BA) patients treated by laparoscopic portoenterostomy (LPE) followed-up for more than 3 years focusing on native liver (NL) survival and outcome.

Methods: We performed 22 LPE between 2009-2016. Classification of BA was isolated (i.e., non-syndromic) type III (n=18), syndromic type III (n=1), and isolated type II (n=3). Biochemical markers, development/growth, and morbidity were used to assess 16 LPE cases followed-up for more than 3 years by comparing NL (n=12) with non-NL (n=4).

Main Results: In NL, BA was non-syndromic type III (n=11) and non-syndromic type II (n=1). Mean age at LPE was 61.7days (range: 29-89); mean follow-up was 5.3 years (3.0-8.3); mean operative time was 548 minutes (414-662); mean blood loss was 12.4g (3-21). Jaundice clearance (JC; total bilirubin <1.2mg/dL) took less than 30 days (n=1), 31-60 days (n=8), and more than 61 days (n=3). Biochemical data is summarized in the table. Post-LPE cholangitis (n=7), portal hypertension (n=3), hepatomegaly (n=5), and splenomegaly (n=7) were identified. Height and weight were normal in 10 and 9 cases and below -1SD in 2 and 3 cases, respectively. Development (gross/fine motor function, receptive/expressive communication, and social interaction) was normal in all. NL survival after 3 years was 12/16 (75.0%). In non-NL, transplantation was required for NL deterioration at a mean of 49.5 months after LPE (9, 14, 27 and 148 months, respectively) despite JC being achieved after LPE at less than 30 days (n=1) and 31-60 days (n=2), respectively. All non-NL cases are clinically stable.

Conclusion: NL survival after 3 years is good with satisfactory outcome. A more extensive study is warranted to confirm these encouraging results.