Outcome of Biliary Atresia After Kasai's Portoenterostomy: Few Concerns

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We read with interest the recent article by Redkar, *et al*. [1] highlighting the surgical outcomes of biliary atresia after Kasai's Portoenterostomy (KPE). Authors reported their experience from a large retrospective cohort reconfirming the utility of jaundice clearance at 3 months post-surgery as a valid indicator of long-term outcome.

There are several points that need to be clarified. In the 'Methods' section, authors mentioned utilizing Hepatobiliary iminodiacetic acid (HIDA) scan, rather than liver biopsy, for diagnostic purpose. All of their patients presented with pale stools. HIDA scan itself has limited use in patients presenting with pale stools considering its low specificity (as low as 45-70%) [2-4]. It adds little to diagnostic evaluation in a cholestatic infant, and is of value only in excluding (and not in diagnosing) billary atresia by documenting patency of biliary tree [1]. On the other hand, sensitivity, specificity and diagnostic accuracy of liver biopsy for diagnosis of billary atresia exceeds 90% [1,4]. Other causes of cholestasis such as bile duct paucity and idiopathic neonatal hepatitis can also have non-excretory HIDA scan, but can be diagnosed reliably on liver biopsy avoiding unnecessary exploratory laparatomy [2].

Authors also tested for 'TORCH' serology in all patients with suspected biliary atresia [1]. Out of the 78 patients tested for TORCH infection, 39 had CMV IgM positive and were treated with gancicyclovir. Routinely doing 'TORCH' serology in these patients is of very limited use as there is still no definite link between 'TORCH' infections and causation of billiary atresia. Investigation for 'TORCH' infections and their subsequent treatment based on only serology (rather than on confirmatory liver tissue histology and polymerase chain reaction based methods) only delays the optimum management, and may even adversely affect the outcomes [5].

In the present study, 14% patients had clinical ascites on admission. This suggests an already advanced liver disease. Though there is no definite upper age limit of KPE, attempting surgery in decompensated liver disease patients is unheard of in literature and is likely associated with extremely poor outcomes. Follow-up of only one year also limits drawing of any definite conclusions from the study, as biliary atresia is a progressive fibro-inflammatory disease even post-KPE.

REFERENCES

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AUTHOR'S REPLY

The points raised by these readers include utilization of liver biopsy rather than HIDA scan for diagnosis of biliary atresia. We would like to clarify that as mentioned in our methods, all patients underwent clinical examination, stool color examination, liver function tests and ultrasonography of abdomen. While TORCH serology and a HIDA scan were done in most patients [1], we have relied on intra-operative cholangiogram as the diagnostic test for BA, which is still considered the gold-standard for its diagnosis [2]. In addition, the interpretation of a biopsy can be difficult and needs an experienced pathologist as there is a lot of overlap in the histological findings of biliary atresia and neonatal hepatitis [3]. Infact, lack of expertise in histopathology has also refrained us from incorporating histological findings in our study report. We have accepted that as one of the limitations in our study [1].

The reviewer also pointed on testing for TORCH serology and treatment for the same. As mentioned above, TORCH serology was done in most (n=78/121) patients as a part of workup for neonatal cholestasis. Ganciclovir was started after a CMV-PCR confirmation