

## Treating Pediatric Liver Tumors in India: A Challenging Proposition

We read with interest the recent article on status of hepatoblastoma in India [1]. In this context, we wish to share our experience of hepatic tumors and highlight certain pertinent points.

Of 825 pediatric malignancies diagnosed at our institution between 2005 and 2012, 13 (1.6%) had primary liver tumors. The median age was 4 years (2 mo - 15 yrs), 9 males. In 12 cases (92.3%), a malignant primary was present of which hepatoblastoma was the commonest, seen in 8(67%) cases. Hepatocellular carcinoma (HCC) was diagnosed in 3(25%) and undifferentiated embryonal sarcoma(UES) in 1(8%). Mesenchymal hamartoma was identified in 1 child. For hepatoblastoma and HCC risk stratification was done according to PRETEXT criteria and SIOPEL-3 chemotherapy protocol was used [2]. Serum alpha-fetoprotein (AFP) was measured in all cases and serially monitored.

Only eight children (61.5%) opted for therapy (6 hepatoblastoma, 1 UES and 1 mesenchymal hamartoma) of which 5 are alive and well at a median follow-up of 30 months. Two with PRETEXT IV disease underwent orthotopic liver transplant (OLT). Five had complete excision of the involved lobe/s and 1 with hamartoma had partial excision. Three relapsed and died (2 hepatoblastoma and 1 UES). Of the relapsed hepatoblastoma patients, 1 was high risk and had undergone OLT. The other did not show expected decline in his AFP levels post complete surgical resection and later relapsed in lungs and bone. There were no deaths in peri-operative period and none due to sepsis or

cardiotoxicity. Five (30.7%) abandoned therapy soon after diagnosis (HCC-3 and Hepatoblastoma-2).

AFP monitoring is vital in management of hepatic tumors. Both very high and low levels of AFP are associated with a poor outcome. Failure of AFP to decline to age appropriate levels with therapy is associated with a high risk of relapse/disease progression [3]. Interestingly, in two patients of hepatoblastoma we found a maternal history of colon cancer. Association of hepatic tumors with inherited syndromes such as familial adenomatous polyposis is well known [4] and must be searched for. Treatment abandonment is a major hurdle in improving outcome of pediatric liver tumors. However, reasonably good outcomes can be achieved if patient comply with therapy.

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## Good Outcome with ATG in Aplastic Anemia: Welcome News, Though Thought-provoking!

We read with interest the article by Nair, *et al.* [1] on immunosuppressive therapy (IST) in children with aplastic. It is encouraging that authors have shared their experience and reported good results. A uniform dose and preparation of anti-thymocyte globulin was administered

to all patients. There are a few points that we would like to highlight.

The response rate reported in earlier studies from India is nearly half as compared to reported by Nair *et al.* The difference is difficult to explain from better supportive care alone, as the patients dying from infections during first 3-months of therapy were excluded from analysis in earlier Indian studies [2-5]. Additional causes for the better response could be lower number of children with very severe aplastic anemia (VSAA) and a