

## The Youngest Successful Pediatric Liver Transplant in India

Till recently the option of liver transplantation was not available to the developing world due to the prohibitive costs, lack of expertise and sophisticated infrastructure. The scenario has improved in the last decade since the first successful pediatric liver transplant in India was performed in our unit ten years ago(1). We now report the youngest successful pediatric liver transplant in India in a 7-month old baby with extra hepatic biliary atresia(EHBA).

A 6 month old child with EHBA, who had undergone a Kasai procedure at the age of 5 months in another hospital, was referred to us with worsening jaundice. On admission, he weighed 7.5 kg, was deeply icteric with palmar erythema and marked hepatosplenomegaly. The abdomen was distended, with ascites and prominent superficial veins. Investigations revealed a serum bilirubin of 48.3 mg/dL (direct 35.4 mg/dL), AST of 258 IU, ALT 142 IU, ALP of 486 IU, GGTP of 159 IU, albumin 3 g/dL and prolonged PT of 25.6 seconds.

The family was counseled for a liver transplant. The infant was operated at the age of 7 months and 7 days and received a segment II and III graft from the left lobe of his father's liver. He was noted to have portal vein thrombosis in the immediate post-operative period that was timely detected. The portal

vein thrombus was removed and a cavoportal diversion was fashioned. He was discharged on day 38 with a serum bilirubin of 0.76 mg/dL (direct 0.42 mg/dL), AST of 28 IU, ALT of 29 IU and, PT of 12.1 and INR of 1. The child is now eight months post transplant and is thriving well. His liver function tests remain normal. Post operative course was uneventful for the donor.

Although pediatric liver transplants have been performed in our country over the last decade(2), transplants in the very young have been very few. There has been some degree of skepticism about the indigenous capability to perform liver transplantation in the very young. With increased awareness and better facilities for diagnosis, more children are expected to be referred for liver transplantation at younger age. This report shows that liver transplantation is possible in the very young using indigenously available skills and infrastructure.

**Anupam Sibal and Ubaid Hameed Shah**

*Pediatric Gastroenterology and Hepatology,*

*Apollo Centre for Advanced Pediatrics,*

*Indraprastha Apollo Hospital,*

*New Delhi, India.*

*E-mail: anupamsibal@apollohospitals.com.*

### REFERENCES

1. Poonacha P, Sibal A, Soin AS, Rajashekar MR, Rajakumari DV. India's first successful pediatric liver transplant. *Indian Pediatr* 2001; 38: 287-291.
2. Kelly DA, Sibal A. Liver transplantation in children. *Indian Pediatr* 2006; 43: 389-391.

## Breast Hamartoma Presenting as Pre-pubertal Gynecomastia

Pre-pubertal gynecomastia is a rare condition in adolescent boys, and may be idiopathic or may result from excessive estrogen production by adrenal or testicular tumors, in association with congenital

adrenal hyperplasia or to over expression of aromatase(1). We report a patient presenting with prepubertal gynecomastia, which on histopathological examination was diagnosed as a hamartoma. A 3½ year old male child was brought with the sole complaint of left sided breast enlargement since 3 years of age. On examination he had unilateral left sided breast enlargement 5 cm × 5 cm, non-tender, soft, without any palpable nodule or discharge (**Fig.1**). Anthropometric examination was normal for age.

Investigations showed serum thyroid stimulating hormone of 2.9 mU/L, free thyroxine 100nmol/L, leutinising hormone 0.7IU/L, follicle stimulating hormone 0.8 IU/L, prolactin 2.6 µg/L, oestradiol 20 pmol/L, 17-hydroxy-progesterone 4 nmol/L, dehydro epiandrosterone sulfate 0.1µmol/L, androstenedione 0.2 nmol/L and testosterone 0.2nmol/L which were all within the normal reference range for his age. Liver and renal function tests, α-feto protein and γ-hCG were also normal. Karyotyping showed normal 46XY male. CT scan of the abdomen and pelvis was normal. USG of the breast showed a well-circumscribed, solid, hypoechoic mass with posterior acoustic shadowing. CT scan of thorax showed a unilateral breast tumor, which was well demarcated, and not infiltrating the chest wall.

Over the next 6 months, his breast swelling increased to 7 cm × 5 cm and hence a subcutaneous mastectomy was performed. Histopathological examination showed well capsulated fleshy mass measuring 6×5×5 cm, which was soft in consistency, with yellow islands of fat tissue. Microscopy showed breast tissue with many cystically dilated ducts with irregular lumina, lobular cells forming acini and occasional foamy and myoepithelial cells. Islands of adipose tissue and dense fibrous tissue were seen. Histopathology thus confirmed hamartomatous fibrocystic breast mass(2).

In summary, we describe a rare case of a three-year-old child presenting as pre-pubertal gynecomastia diagnosed as hamartoma on excision biopsy. As the underlying pathophysiology of pre pubertal gynecomastia has not yet been determined, detailed evaluation of such patients is necessary before surgical intervention is undertaken.

**V Khadilkar and R Jehagirdar**

*Hirabai Cowasji Jehangir Medical Research*



**FIG. 1** Child with unilateral left sided gynecomastia.

*Institute,  
Jehangir Hospital, 32, Sassoon Road,  
Pune 4110 001.  
E-mail: vamankhadilkar@gmail.com*

#### REFERENCES

1. Braunstein GD. Aromatase and gynecomastia. *Endocr Relat Cancer* 1999; 6: 315-324.
2. Deshpande A, Munshi M. Mammary hamartoma: report of two cases including one in a male breast, and review of the literature. *Indian J Pathol Microbiol* 2004; 47: 511-515.