

## Atypical Presentation of Giant Hepatic Sol in a Three Years Old Girl

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**Abstract:** We report a case of three years old female child presenting with giant abdominal SOL eventually diagnosed as benign hepatic mass. The size of the lesion with its way of presentation is a rare entity in this age group.

**Keywords:** Giant hepatic mass, Pediatric liver SOL, Simple liver cyst.

### INTRODUCTION

Liver space-occupying lesions (SOLs) in the pediatric population are unique and distinct when compared with those in the adult population [1].

Benign primary liver masses described in children include hemangioma/infantile hepatic hemangio-endothelioma, focal nodular hyperplasia, simple hepatic cysts, mesenchymal hamartomas, adenomas, nodular regenerative hyperplasia, hematomas, arterial venous malformations, granulomas, and lymphangiomas [2, 3]. Giant cystic space occupying lesions of the liver are the rarest among these. Hence we are reporting this case which also presented as a masquerade.

### CASE REPORT

A three year old female child presented to our outdoor department with complaints of rapid onset abdominal distension over 20 days. There were no associated abdominal symptoms. Bowel and bladder habits were normal.

On examination, the child presented with giant intra abdominal mass occupying all four quadrants of the abdomen. The mass was 15 X 15 cm in size occupying four quadrants. It was irregular in shape, firm in consistency with uneven surface. It did not move with respiration and had restricted side to side mobility.

Systemic examination was essentially within normal limits.

Hemogram was normal. Sonographically a large multiloculated cystic lesion with well defined septa likely to be mesenteric or ovarian cyst.

CT Imaging suggested large multiseptated cystic lesion of size 208 x 185 x 114 mm, likely to be mesenteric lymphangioma.

On exploration, large cystic mass was found arising from left lobe of the liver. It was difficult to separate from the adjacent liver margin. Total excision of the cyst with minimal adjacent liver tissue was performed. There was minimal bleed from liver surface stopped by application of surgicels and cauterization.

Post operatively, the mass weighed 3.5 kilograms.

Histopathology of biopsied specimen turned out to be a benign hepatic mass.



Fig. 1: Intraoperative photograph of resected mass



Fig. 2: Resected mass post operative



Fig. 3: Gross appearance cut open

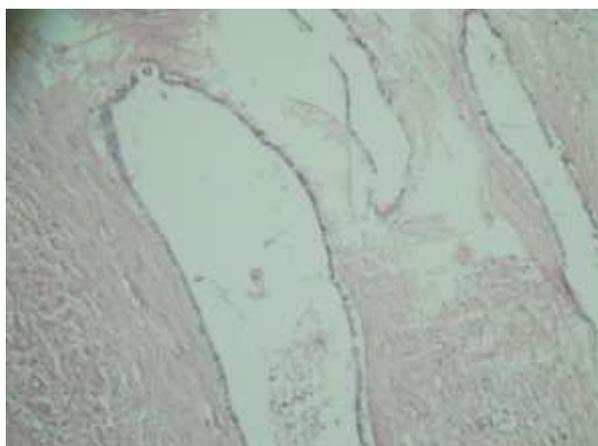


Fig. 4: Photomicrograph showing cystic spaces 10X

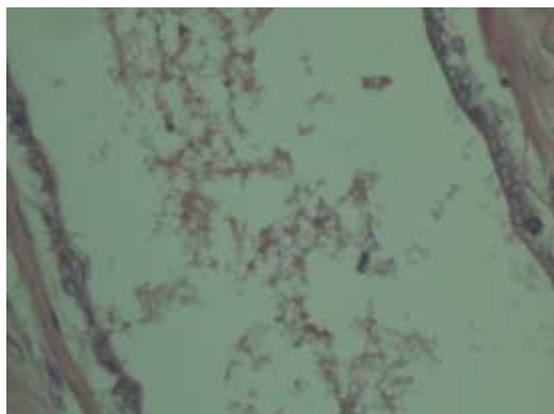


Fig. 5: Photomicrograph showing cystic spaces 10X

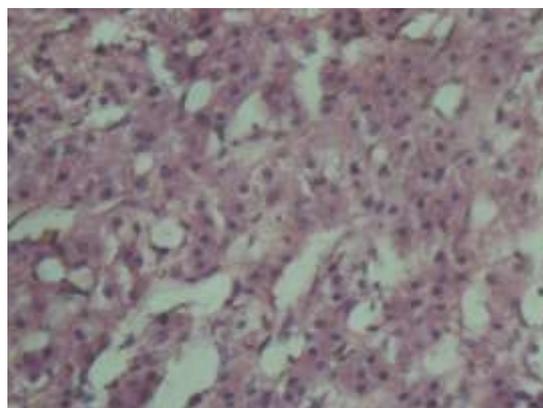


Fig. 6: Photomicrograph of adjacent hepatic parenchyma

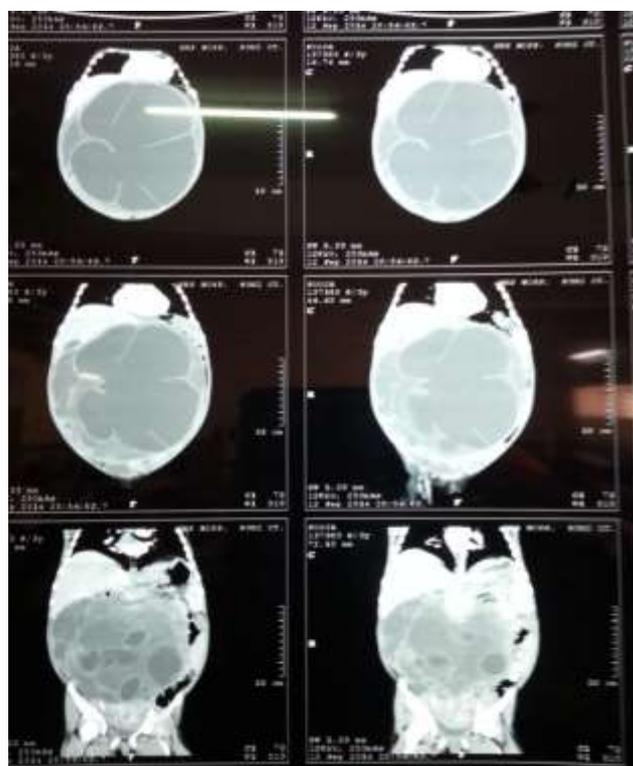


Fig. 7: Contrast imaging of the mass

## DISCUSSION

The chief objective of outlining this case report was to highlight the range of suspicion one should have when dealing with giant asymptomatic abdominal mass.

In pediatric group, simple liver cysts tends to be small and could be distinguished from other pathologies by the use of imaging techniques such as ultrasound, magnetic resonance imaging/magnetic resonance cholangiopancreatography (MRCP), radionuclide scan. In a prospective study by Rogers *et al.* in 2007, only 2 of 12 children with "simple" cysts required surgery for symptoms [4].

Liver cysts in children are uncommon. Many of them are simple and solitary without requiring intervention. Simple solitary nonparasitic liver cysts rarely cause symptoms or require surgery, but in order to ensure proper treatment, the pediatric surgeon must be aware of the wide range of other types of liver cyst in children to ensure [1].

Hemangioendothelioma of liver and focal nodular hyperplasia are the most common lesions. The majority of benign lesions are found incidentally and diagnosed radiologically. Expectant management is sufficient in most children after diagnosis, although surgical intervention including liver transplant is occasionally necessary [2].

The recurrence rates after surgery has been found to be very low with excellent long term prognosis [5].

## CONCLUSION

As this case was causing marked abdominal distension and parents were worried about the disease of their child, they consulted pediatric surgeon. Preoperative diagnosis in the present case was presumed to be a mesenteric cyst. These all considerations led us to intervene surgically. Giant left hepatic mass was the result. Postoperative period was uneventful with a good recovery.

## REFERENCES

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