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A Case Report on Biliary Atresia

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Abstract:- Cholestatic jaundice or Biliary atresia, present in the newborn period is a potentially serious disorder that may result from either a treatable or a nontreatable disorder. Biliary atresia is an obstructive neonatal cholangiopathy of unknown etiology that produces damage to the parenchyma of the liver and to the intrahepatic and extrahepatic bile ducts. It is the most common cause of neonatal cholestasis and liver transplantation in the pediatric population. The clinician initially must recognize the presence of prolonged or pathologic jaundice in newborns. This case report presents a case of infant who had congenital atresia, but the clinician fails to diagnose it during the initial stages and was later diagnosed when the infant was 3 month old. The symptoms developed in the newborn are jaundice, pale stools, dark colored urine and elevated body temperature. Due to the failure of initial diagnosis, the child was advised immediately to undergo liver transplantation, which improved the condition and the supportive treatment was given to the infant.

Keywords:- *Cholestatic Jaundice, Biliary Atresia, Cholangiopathy, Intrahepatic, Extrahepatic*.

I. INTRODUCTION

Biliary atresia is a rare disorder which blocks the bile flow from the liver to the gall bladder; causes the accumulation of bile within the liver and leads to hepatic fibrosis. It is mostly affected in infants with a ratio of 1 in 15,000-20,000[1]. Female infants are more prone to develop atresia than male infants. The etiological factor responsible for the development of this rare condition is unknown. The organs which can be affected with the Cholestatic jaundice are heart, spleen, blood vessels and intestine [1, 2, 3]. The symptoms shown in the infants can be as follows: dark colored urine, weight loss, irritability, jaundice, and pale colored stools [1, 4, 5]. Biliary atresia can be diagnosed with the help of clinical manifestations, LFT, liver biopsy and radiological techniques, especially USG-abdomen and HIDA scan [1, 5]. It cannot be treated with medications. If the condition is diagnosed at early stage (<3 months), Kasai procedure can be preferred. But it's not the complete cure for the disease, it allow babies to grow and have fairly good health for several, sometimes for many years. Whereas if the condition is diagnosed at late stage, liver transplantation is the only remedy to overcome this condition.

II. CASE REPORT

A female infant was born with a complaints of jaundice, dark colored urine and pale stools. After few days, she had developed persistent fever along with all those symptoms. The clinician advised to take antibiotics; IV cefotaxime and amikacin; fever got subsided but the other symptoms were not cured. The child was shifted to another multispecilaity hospital and undergone serious investigations as follows:

- LFT showed AST-428U/L, ALT-295U/L, ALP-722IU/L, INR-4.3 and Albumin-3g/dl.
- UST ABDOMEN: hepatosplenomegaly and contracted gall bladder.
- HIDA SCAN: No definite evidence of bilioenteric drainage.
- CT SCAN : hepatomegaly, contracted gallbladder, few enlarged peripancreatic and periportal nodes, umbilical hernia.

Based on the clinical manifestation, LFT and radiological parameters, the infant was diagnosed with Biliary atresia or Cholestatic jaundice. The infant was not diagnosed at the early stage so the clinician recommended for liver transplantation, as the Kasai procedure cannot be done.

Pre-transplant evaluation was done and the infant was prepared for the liver transplantation by giving the following medications:

- Justdee drops 2ml OD
- Evion drops 1ml OD
- Tab. Vit.K 2.5mg OD
- Zincovit drops 1ml OD
- Syp. Macalvit 5ml BD
- Tab. Udiliv 150mg ½ BD

The infant was undergone the transplantation and was advised to take supportive treatments such as Omnacortil 10ml OD and Tacrolimus 100mg BD.

III. CONCLUSION

Biliary atresia, is a rare disorder and is mostly seen in newborns. If it is left untreated, it may lead to non curable complication such as cirrhosis. Our case report can raise the awareness among the parents to foreseen the changes that happens to the infants during the child birth such as change in stool color, urine color, jaundice etc. This report is an eye opener to the paediatrician to take an effective measurement

in early diagnosis, which prevents the infants from life threatening conditions.

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