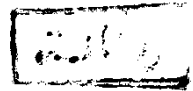


An Essay On  
Viral Hepatitis In Neonates

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*Introduction  
and  
Aim of the work*

## INTRODUCTION

Neonatal hepatitis is a serious disease which was first distinguished from biliary atresia by Craig and Landing in 1952 .This term was coined for presumed viral infection of the liver in early infancy,(Danks et al.,1977 ). However , different aetiologies are now recognised, these are :

1 ) Infective causes :

a- Viral : Cytomegalovirus ,  
Hepatitis B virus ,  
Rubella virus ,  
Herpes simplex virus ,  
Coxsackie B virus ,  
Herpes zoster virus and,  
Adenovirus .

b- Non viral : Syphilis ,  
Toxoplasmosis ,  
Listeriosis ,  
Septicaemia and,  
Urinary tract infection .

2 ) Genetic-metabolic disorders as :

Galactosemia ,  
Fructosemia ,  
Tyrosinosis ,  
Alpha -1- antitrypsin deficiency ,  
Cystic fibrosis ,  
Neimann - Pick disease ,  
Byler syndrome ,  
Rotor syndrome , and  
Abnormal bile salt metabolism .

3 ) Rare familial syndromes,e.g with cardiac lesions ,  
lymphoedema , mental retardation , abnormal facies,and  
skeletal abnormalities .

4 ) Chromosomal abnormalities as trisomy 13 , 18 , 21 ,  
and Turner's syndrome .

5 ) Haemolytic disorders .

6 ) Microcystic disease of the liver and kidney .

7 ) Toxins, drugs,etc. e.g halothane .

8 ) Idiopathic neonatal hepatitis .

- 9 ) Intrahepatic cholestasis of infancy .
- 10) Cortisol deficiency .

Transplacental infection by many infective agents capable of damaging the liver is fairly common but in most cases it causes no noticeable illness except in the presence of some second diseases which predispose the fetus to develop overt disease . Of these diseases some are associated with increased susceptibility to infection as Down's syndrome and chondrodysplasia-punctata, others cause some liver damage as cystic fibrosis and Niemann-Pick disease, or place an unusual load on liver function e.g haemolytic disease of the newborn. Therefore, it seems more reasonable to propose that most of the diseases listed previously act by non-specifically increasing susceptibility to agents causing hepatitis than to claim that each can specifically cause a liver lesion in an occasional baby ( Danks et al., 1977 ) .

The patients with neonatal hepatitis in whom all aetiological tests proved negative offer the most interesting challenge . A number of characteristics of this group can be described ; premature delivery , low birth weight for maturity , striking excess of males , occurrence in sibs with a frequency of about 15 % and recessively inherited conditions seem certain in some cases . The term idiopathic neonatal hepatitis is designed to describe this group of patients ( Danks et al.,1977 ) .

Giant cell transformation a frequent histological component of neonatal hepatitis is considered to be a characteristic change resulting from mitotic inhibition of the young growing liver tissues by number of agents such as viruses . The number of these giant cells decreases as the patient grows older and are very rare after the age of one year , ( Montgomery and Ruebner,1976 ) .

7. AIM OF THE WORK :

Neonatal hepatitis is not a rare disease, its incidence is about 1 / 8000 live births and the mortality rate is as high as 40 % of cases ( Danks et al.,1977 ) . Our aim is to write a review about viral neonatal hepatitis :

- Pathogenesis .
- Clinical features,
- Investigations .
- Prevention and treatment .

We shall concentrate in our review about :

- Virus B hepatitis ,
- Cytomegalovirus hepatitis ,
- Herpes simplex hepatitis and,
- Congenital rubella hepatitis .



# Pathogenesis and Clinical Features