

## INTRODUCTION

Viral hepatitis infections can produce various dermatologic findings in patients who are known to have been infected or are unaware of their exposure to these viruses. Hepatitis can present with a wide variety of cutaneous manifestations. Dermatologists should be aware of this for prompt and early diagnosis. Of all blood borne infectious diseases, hepatitis has the greatest chance for accidental transmission through trauma in the skin during surgical procedures, needle sticks, etc.

In spite of universal precautions used by dermatologists an occasional accident occurs (*Parsons et al., 1996*). An awareness of this possibility in patients with any of cutaneous signs of hepatitis, should make the dermatologists more aware of possible infectious transmissibility. Care in invasive diagnostic procedures is the best prevention (*Parsons et al., 1996*).

The annual incidence of acute viral hepatitis in the United States was reported to be 2.5% (*Koff et al., 1973*).

In Egypt hepatitis is a prevalent disease and the reported annual incidence of hepatitis was 9.2% for hepatitis C (*Saeed et al., 1991*) and 10% for hepatitis B (*Sherif et al., 1985*).

Viral hepatitis is broadly classified into the following categories :

### Hepatitis A :

Hepatitis A virus is an RNA enterovirus, Enterovirus 72. It is usually transmitted by the fecal - oral route with only rare transmission by the parenteral route (*Arnold et al., 1990*).

**Hepatitis B :**

Hepatitis B virus is a DNA virus that can be transmitted through blood products, contaminated needles and during sexual activity (*Burrel, 1980*).

**Hepatitis C :**

Hepatitis C is a single - stranded RNA virus. It is transmitted parenterally through either blood product infusion or intravenous drug use (*Van der Poel et al., 1989*). There is an increased prevalence of hepatitis C in prostitutes, intravenous drug - abusers, and homosexuals (*Brettler et al., 1992*).

**Hepatitis D :**

Hepatitis D virus or "delta hepatitis", is an infection with a defective RNA virus that depends on the hepatitis B virus for its replication. Infections with hepatitis D virus is frequently seen in the Middle East and in Central and South America, where there is also a large population with hepatitis B virus infection (*Mishra and Seeff, 1992*).

**Hepatitis E :**

Hepatitis E virus is a DNA virus that is transmitted by the fecal - oral route similar to the transmission of hepatitis A virus (*Herrera, 1993*).

**Presentation of hepatitis patients :**

Viral hepatitis is a systemic disease primarily involving the liver. Hepatitis viruses produce acute inflammation of the liver, resulting in clinical illness characterised by fever, gastrointestinal symptoms such as nausea, vomiting and jaundice. Regardless of the virus type identical

histopathological lesions are observed in the liver during acute disease (*Boggs et al., 1970*).

The dermatological manifestations of hepatitis are variable with the different types of hepatitis.

However the commonst cutaneous manifestations include : Lichen planus, serum sickness like prodrome, urticaria, erythema nodosum, recurrent papular eruption of trunk and upper extremities, Gianotti - Crosti syndrome, leukocytoclastic vasculitis, polyarteritis nodosa, mixed cryoglobulinaemia, pyoderma gangrenosum, dermatomyositis like syndrome, porphyria cutanea tarda, cutaneous vasculitis, panniculitis, scarlatiniform eruption, (*Parsons et al., 1996*), nodular prurigo (*Yamamoto & Yokoyama, 1996*), necrolytic acral erythema (*El Darouti and Abu El Ela, 1996*) and unilateral nevoid telangiectasia (*Hynes and Shenefelt, 1997*).

This is in congunction with the current dermatologic manifestations associated with liver disease such as Jaundice, xanthomatosis, pruritus, melanine hyperpigmentation, vascular changes (telangiectasia, spider nevi, plamar erythema, corkscrew scleral vesseles, dilated umbilical veins and purpura), loss of hair, testicular atrophy, gynecomastia, cutaneous striae, splinter haemorrhage under the nails, nail changes (Clubbing, watch glass deformity, white nails, flat nails, azure lunules) (*Rook, 1979*).