**Hepatitis C complications**

Patients undergoing treatment for Hepatitis C must be monitored closely for complications.

### Rheumatological complications

**Variable timeframe**

- Rheumatological manifestations include myalgia, fatigue, arthralgias, and arthritis
- Autoimmune manifestations include Sjögren’s syndrome

### Cryoglobulinemia

**Variable timeframe**

- The likelihood of asymptomatic cryoglobulinemia is high, and that of symptomatic cryoglobulinemia is low
- Cryoglobulins are single or mixed immunoglobulins that undergo reversible precipitation at low temperatures
- Cryoglobulins deposit in the skin, kidney, and joints. Patients may present with fatigue, arthralgias, peripheral neuropathy, palpable purpura (above), or glomerulonephritis
- The most common variant in people with hepatitis C is type II (mixed) cryoglobulinemia

### Medium likelihood complications

**Cirrhosis**

**Long term timeframe**

- Only 2-20% of those chronically infected develop cirrhosis, usually over a period of roughly 20-25 years.
- The risk of developing cirrhosis increases with the duration of chronic infection
- Patients with HIV coinfection and those who drink moderately or heavily may progress to cirrhosis much more quickly

**Skin complications**

**Variable timeframe**

- Associated skin lesions include porphyria cutanea tarda and lichen planus (below)

**Cryoglobulinemia**

**Variable timeframe**

- The diagnosis is made by exclusion of other causes of corneal ulceration

### Low likelihood complications

**Hepatoma**

**Long term timeframe**

- Hepatocellular carcinoma is typically seen only in HCV infected patients with cirrhosis, but it can occur in patients without cirrhosis
- The incidence in Western nations has increased in the past two decades, mainly because of the large pool of people with hepatitis C
- Manifestations include abdominal pain, lethargy, or weight loss. Hepatocellular carcinoma may also be asymptomatic and be discovered only on radiographic imaging
- It may be suspected in patients with cirrhosis if it is decompensated

**Glomerulonephritis**

**Variable timeframe**

- The most common kidney disease related to hepatitis C is membranoproliferative glomerulonephritis (above), which may present with proteinuria, haematuria, and even oedema, hypertension, and renal insufficiency

**Eye complications**

**Variable timeframe**

- Eye manifestations include keratoconjunctivitis sicca (dry eyes) (below), which may be a manifestation of Sjögren’s syndrome, and Mooren ulcer (a rapidly progressive, painful ulceration of the cornea)
- The diagnosis is made by exclusion of other causes of corneal ulceration

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