

HEPATITIS C CONDITIONS OUTSIDE OF THE LIVER:

Skin Conditions Related to Hepatitis C Infection

Hepatitis C: It's About More than Liver Disease

While chronic hepatitis C virus (HCV) infection is known to have damaging effects on the liver, it is also associated with a variety of skin conditions. These conditions can be an early indicator of HCV infection, and therefore, it is important to recognize the signs and symptoms of these disorders.

LICHEN PLANUS

What is it?

Lichen planus is a condition that produces bumps on the skin or in the mouth. It is caused by inflammation triggered by the immune system in response to HCV infection.

How common is it?

4-23%

of HCV patients are affected with this condition.¹

Diagnosis

Diagnosis is typically made by physical examination of skin lesions. In some cases, a skin biopsy may be performed to confirm the diagnosis.



Photo: Richard Knox, NPR.org

Symptoms

On the skin: **purple, itchy bumps**
(typically on the wrists, forearms, ankles, shins, scalp, genitals)

In the mouth: **white bumps**
(usually on the inside of the cheeks, tongue, or lips)

Complications

If not treated early, it is possible that this condition can progress to a type of cancer called squamous cell carcinoma.²

Treatment*

- Sometimes this condition clears up on its own and does not require specific treatment.
- When treatment is required, steroid medications may be prescribed.
- The effect of HCV treatment on this condition is not known.

* All treatment should be done in consultation with a licensed healthcare provider.

PORPHYRIA CUTANEA TARDA



What is it?

This is a disorder that can produce various abnormalities of the skin. It occurs in HCV-infected individuals because HCV reduces the liver's ability to produce enzymes that breakdown certain chemical substances in the body. These substances, which are sensitive to sunlight, build up in the blood and cause skin conditions.

How common is it?

1-5%

of HCV patients develop this condition.³

Diagnosis

A healthcare provider might suspect this condition based on a patient's symptoms. Diagnosis can be confirmed with a urine test or blood test.

Symptoms

- **Painful or itchy skin lesions**, which are more likely to be found in areas exposed to sunlight
- Discoloration of the skin
- Abnormal hair growth
- Scarring
- Red or brown urine

Complications

While the reasons are not clear, this skin condition is associated with cirrhosis and liver cancer.¹

Treatment*

- Patients with this condition are advised to avoid sunlight or to wear clothing that protects against the sun (such as long-sleeved shirts and pants). Sunscreens or creams containing zinc oxide may be recommended.
- Some patients may also be prescribed oral medications.
- Providers may recommend getting regular blood draws. Removal of blood can help reduce the excess substances in the body.
- Research about the effect of HCV medications on relieving symptoms of this condition is limited, but it is possible that HCV treatment may resolve this condition.⁴



Photo: www.cdc.gov

* All treatment should be done in consultation with a licensed healthcare provider

NECROLYTIC ACRAL ERYTHEMA



What is it?

This is a rare but important skin condition that can be an early indicator of HCV infection. Presence of this disease is almost always associated with HCV.³ Therefore, HCV screening should be conducted if this condition is suspected.

The causal mechanism of this disease is not known, but there is some evidence that it is related to disrupted metabolic function of the liver and low levels of zinc.



How common is it?

< 2%

of HCV patients develop this condition.³



Diagnosis

Diagnosis can be challenging because this condition has symptoms that look like other skin conditions. It may involve physical examination of the skin and blood tests to check levels of zinc and other substances. A skin biopsy may also be performed.

Because this condition is often associated with HCV, healthcare providers may also do tests to confirm HCV infection.



Symptoms

Individuals with this condition have red or purple, scaly skin patches that may burn, itch, or cause pain.

Later stages lead to thickening and discoloration of the skin. The legs, feet, and hands are commonly affected areas.



Complications

Because this disease affects the feet and hands, severe cases can impact activities of daily living. Painful skin lesions may affect a person's ability to walk or work with their hands.

Treatment*

- Steroid medications, which can be directly applied to the skin or taken orally, may be recommended but do not work for everyone.
- Oral zinc supplements may relieve symptoms.
- It is not clear if HCV medications will ease symptoms of this disease.

** All treatment should be done in consultation with a licensed healthcare provider.*

1. Sayer M, et al. (2017). Dermatologic manifestation of chronic hepatitis C infection. Clin Liver Dis, 21(3): 555-64.
2. Gill K, et al. (2016). Hepatitis C virus as a systemic disease: reaching beyond the liver. Hepatol Int. 10(3):415-23.
3. Wozniak LE, et al. (2017). Hepatitis C virus and its cutaneous manifestations: treatment in the direct-acting antiviral era. J Eur Acad Dermatol Venereol. 31(8):1260-70.
4. Callen JP. (2017). Hepatitis C viral infection and porphyria cutanea tarda. Am J Med Sci. 354(1): 5-6.