



Hepatitis From A Sexually Transmitted Bacterial Infection

Muaaz Masood MD, Ashley Fox MD, Ahmad Alkaddour MD, Kenneth J. Vega MD, FACC

Department of Medicine, Division of Gastroenterology and Hepatology

Medical College of Georgia at Augusta University, Augusta, GA



INTRODUCTION

- **Syphilis** is a multisystemic, sexually transmitted infection that is caused by the spirochete *Treponema pallidum*.
- **Hepatic involvement** is rare
- We present a patient who was diagnosed with **syphilitic hepatitis (SH)**

CASE DESCRIPTION

- A 54-year-old male presented to the hospital with **1 week of sharp upper abdominal pain, jaundice, poor appetite**, and a **25-lb. weight loss**
- He reported **multiple sexual partners** and a **rash** that developed 2 months ago
- Vital signs were within normal range
- Physical examination revealed **scleral icterus**, a soft, non-tender abdomen, a **plaque-like penile lesion** and small, **circular lesions** on his **palms** and **soles of feet**
- Laboratory studies: **AST 164 U/L, ALT 207 U/L, ALP 1395 U/L, T. bili 5.6 mg/dL, GGT 782 U/L**
- **Additional workup:** Hepatitis panel, acetaminophen and alcohol levels were **negative**; testing for chronic liver disease was **unremarkable**
- **Treponemal antibody** and **rapid plasma reagin** test were both **positive**
- HIV test and cerebrospinal fluid venereal disease research laboratory (VDRL) test were **negative**
- Abdominal ultrasound and CT scan of the abdomen were **unremarkable**
- MRCP revealed **hepatomegaly** and **hepatitis**
- Treatment: **1 dose of penicillin G 2.4 million units intramuscularly** with **remarkable improvement** in his **symptoms** and **liver function tests**
- Disposition: **Discharged home** with close follow-up with gastroenterology and infectious disease

DISCUSSION

- SH occurs in **0.2-9.7%** of patients with syphilis and is most commonly seen in the **primary** and **secondary** disease stages
- **Clinical manifestations**
 - Maculopapular rash (involving the trunk, palms and/or soles of feet)
 - Fatigue
 - Poor appetite
 - Hepatomegaly
 - Icterus
- Liver function tests (LFTs) may reveal a **marked increase** in **ALP** and **GGT** in comparison to ALT and AST
- **SH is diagnosed** with the following:
 - **Abnormal LFTs**
 - **Serological evidence of syphilis**
 - **Exclusion of other liver diseases**
 - **LFTs returning to normal after antibiotic therapy (as in our patient)**
- The histological features of SH include **inflammatory infiltration** of the **bile duct** and **hepatic granulomas**
- Spirochetes are often difficult to identify in liver tissue
- **Penicillin** is the mainstay of treatment

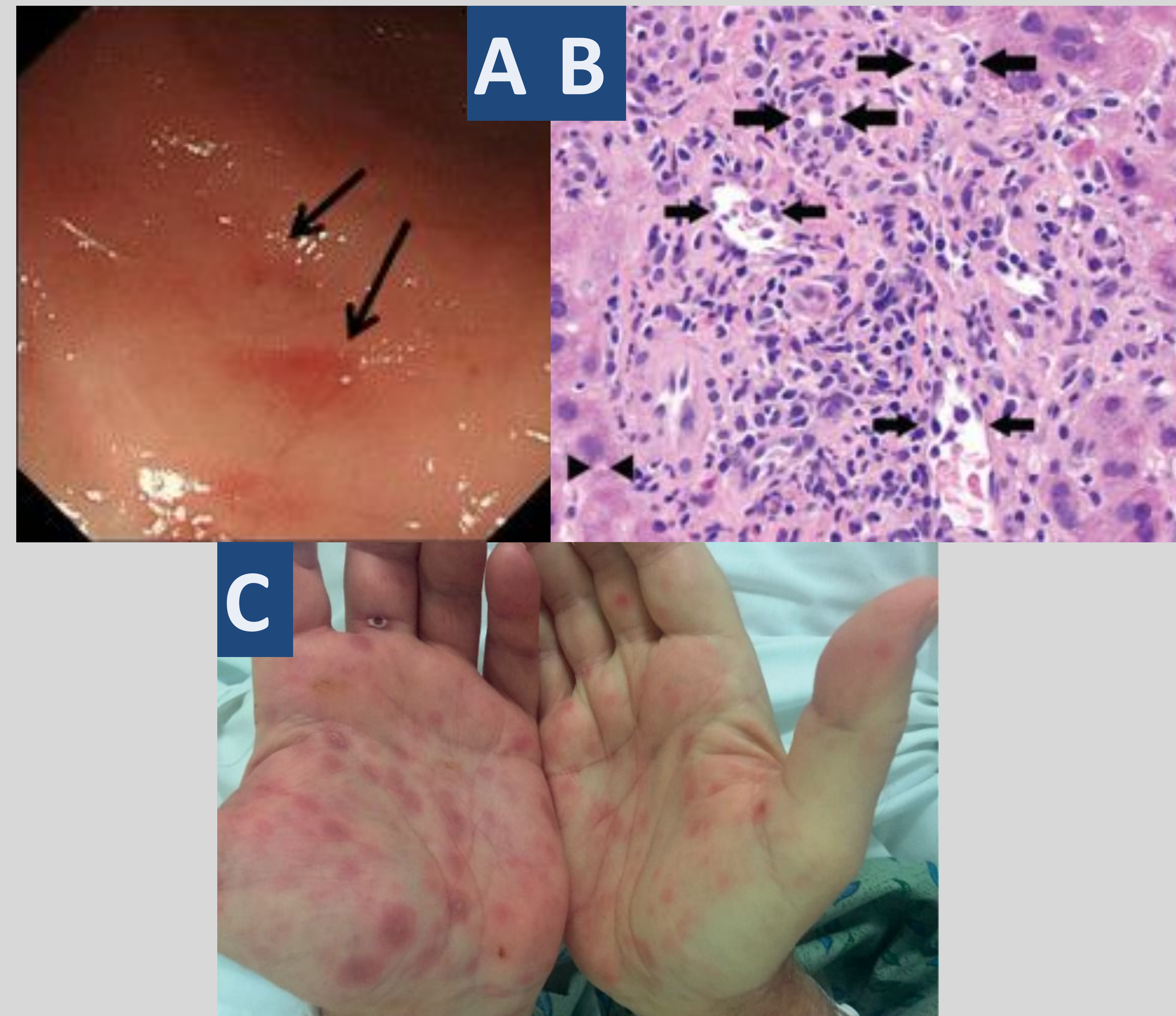


FIGURE LEGEND

- **Figure A:** Mild erythema in rectosigmoid colon on colonoscopy
- **Figure B:** Mild, mixed inflammatory infiltrate with destruction of the bile ducts (large arrows), endothelial inflammation of the portal veins (small arrows) and intracytoplasmic cholestasis (arrowheads) as seen on histologic section of hepatic portal tract
- **Figure C:** Papulosquamous rash involving the palms of the hand

CONCLUSION

- **Clinicians should consider syphilitic hepatitis in a patient with abnormal LFTs (especially ALP) and a rash involving the palms and soles of feet in the appropriate clinical context**

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