Mpx proctitis as a likely predisposing factor for chlamydial pericholangitis in a male patient

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ABSTRACT
Pericholangitis (Fitz-Hugh-Curtis syndrome) is a rare complication of sexually transmitted infections, mostly seen in women. Only 12 male cases have been reported to date, of which Chlamydia trachomatis was confirmed in 2. We report a case of chlamydial pericholangitis in a male patient, occurring 1 month after Mpx and associated with the unusual LGV ST23 strain. Our case suggests that rectal Mpx lesions may facilitate chlamydial dissemination.

BACKGROUND
Mpx, once a rare zoonotic viral disease, is now an emerging sexually transmitted infection (STI). The recent outbreak is characterised by human-to-human transmission and newly described complications. Pericholangitis (Fitz-Hugh-Curtis syndrome) is a rare complication of pelvic inflammatory disease caused by STIs. It is rare in men, possibly because it requires an anatomical port of entry.

PRESENTATION
A 37-year-old man presented to the emergency department (ED) with a 10-day history of high-grade fever, malaise and abdominal left upper-quadrant (LUQ) pain. He appeared septic. This was his third visit to the ED since symptoms began. On his first visit, a physical examination revealed slight LUQ tenderness; blood tests showed only slightly elevated C reactive protein (CRP, 31 mg/L). On his second visit, abdominal CT showed minimal intraperitoneal fluid without the evidence of colitis. Alanine aminotransferase (ALT) was mildly elevated (83 U/L), and the CRP was 158 mg/L. On both visits, he was discharged without a specific diagnosis or treatment.

A month prior to the first ED presentation, the patient had experienced fever, severe abdominal and rectal pain and lesions on his buttocks, genitalia and neck, and was diagnosed with Mpx. The diagnosis was confirmed by a positive PCR. Complete STI screening panels were negative, including PCR for Chlamydia trachomatis, Neisseria gonorrhoeae and Mycoplasma genitalium from the pharynx, rectum and urethra, as well as HIV and venereal disease research laboratory (VDRL) serologies. Treponema pallidum hemaggulination assay (TPHA) was positive due to a previous infection. His social history included sexual activity with multiple male partners without barrier protection, both before his Mpx infection and soon after his recovery from it. He had been taking emtricitabine/tenofovir for HIV pre-exposure prophylaxis for 6 years.

INVESTIGATIONS
Clinical examination revealed signs of peritoneal irritation. Laboratory tests showed haemoglobin 10.8 g/dL, mildly elevated liver function tests (ALT of 75 U/L, aspartate aminotransferase of 81 U/L and gamma-glutamyl transferase of 81 U/L) and a CRP of 402 mg/L. A repeat CT showed large fluid collections in the periperteal and perisplenic spaces and thickening of the peritoneal lining, without signs of colitis. An urgent diagnostic laparoscopy revealed cloudy peritoneal fluid and diffuse string-like adhesions on the right colic flexure (A) and around the liver (B).

Figure 1 A laparoscopic view of cloudy peritoneal fluid and violin string-like adhesions on the right colic flexure (A) and around the liver (B).
Repeat STI and Mpox virus tests from pharynx, rectum and genitalia were negative. A careful rectal examination and anoscopy were negative for colitis and for other possible sites of perforation. Based on the findings, a diagnosis of chlamydial perihepatitis was made.

**TREATMENT**

The patient was hospitalised and monitored for 12 days and made a full recovery with doxycycline 100mg orally two times daily for a total of 21 days.

**DISCUSSION**

Perihepatitis was believed to affect only women. However, 12 cases in men have been reported, of which *C. trachomatis* was confirmed in 2. The exact pathogenesis is not fully understood. In women, suggested mechanisms include ascending infection from the reproductive tract, extension through the lymphatic system and haematogenous spread. In men, the pathogenesis is more elusive.

Our patient had perihepatitis due to LGV ST23, a strain that had not been identified in Israel before. Although LGV may cause inflammatory bowel disease–like colitis and lymphadenitis, it was rarely described as a cause of perihepatitis. Our case is also unique in its causative pathogen, LGV ST23. LGV may be reactivated in local lymph nodes withMpox and LGV unlikely and suggests instead that LGV was a potential facilitating factor for chlamydial peritoneal dissemination. In summary, this is the first report to confirm in 2.

**SUPPLEMENTAL MATERIAL**

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