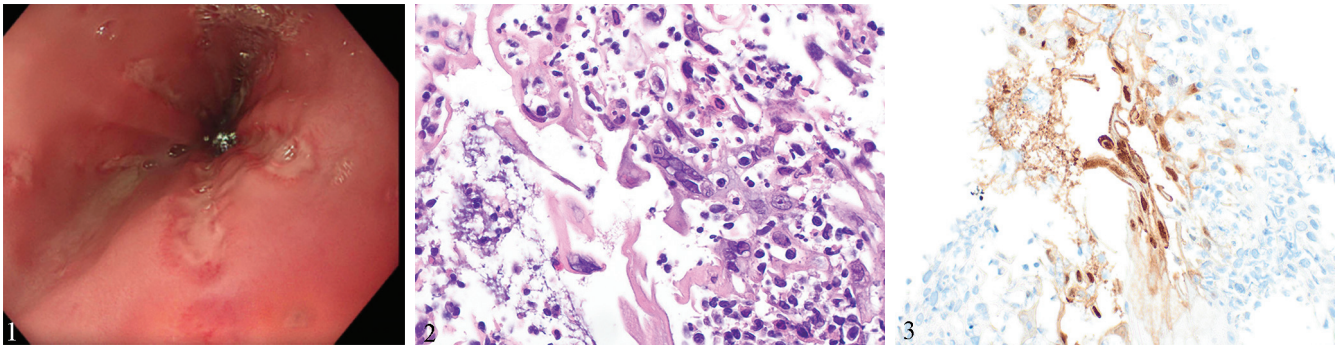


Herpetic Esophagitis: A Painful Diagnosis in an Immunocompetent Male

Robert S. O'Neill^{1,2}, Phillip Leaver^{1,2}, Sharron Liang³, David B. Williams², Harry Crane²

1) St Vincent's Clinical School, Faculty of Medicine, University of New South Wales; 2) St Vincent's Hospital, Department of Gastroenterology and Hepatology, Sydney; 3) Department of Anatomical Pathology, Sydpath, St Vincent's Hospital, Darlinghurst, NSW, Australia



A 21-year-old male presented with a 4-day history of odynophagia, myalgias, fever and retrosternal discomfort. He had a background history notable for septic arthritis of the left wrist. He was not on any regular medications. Examination was notable for bilateral tonsillar erythema, bilateral cervical lymphadenopathy and epigastric tenderness. Preliminary investigations revealed a white cell count of $7.7 \times 10^9/L$ with a lymphocyte count of $0.8 \times 10^9/L$ indicating lymphopenia. His C-reactive protein (CRP) was elevated to 160 mg/L; cytomegalovirus (CMV) IgM and IgG, herpes simplex (HSV) 1 and 2 IgG, Epstein Barr virus (EBV) viral capsid antigen (VCA) IgG and IgM were all undetectable. Syphilis enzyme immunoassay and human immunodeficiency virus antigen/antibody tests were also negative. Esophagogastroduodenoscopy revealed multiple punched out and linearly confluent ulcers in the mid to distal oesophagus (Fig. 1); biopsies were taken.

A 12 FR nasogastric tube was inserted for feeding. Due to concern for a viral infectious oesophagitis, intravenous acyclovir 425 mg 8 hourly was commenced. Histopathological analysis demonstrated erosion and spongiosis of squamous mucosa with focal cells showing multinucleation, and containing round, homogeneous, basophilic intranuclear viral inclusions with surrounding chromatin clumping (Cowdry type A inclusions) (Fig. 2). These cells were positive for HSV-1 on immunohistochemical analysis (Fig. 3). Stains for CMV and varicella-zoster virus were negative. A diagnosis of herpetic esophagitis (HE) was made. After 3 days of intravenous therapy, the patient was able to tolerate oral intake and was de-escalated to oral valaciclovir 500 mg twice daily. The patient was discharged to complete a 10-day course of oral valaciclovir.

Risk factors for the development of HE include excessive alcohol consumption, corticosteroid use, extensive burns, malnutrition or autoimmune disease. However, the disease itself

is rare in the immunocompetent population [1, 2]. Symptoms vary from odynophagia to vomiting, with serious complications including oesophageal perforation [3]. The middle and lower thirds of the oesophagus are the most commonly affected areas. The diagnosis usually relies on typical endoscopic findings, namely multiple small ulcers with or without raised margins and fibrin exudate, with histological analysis revealing Cowdry type A (eosinophilic) inclusion bodies and multinucleated giant cells [2, 4, 5]. This case highlights an uncommon case of acute HE secondary to HSV-1 in an immunocompetent male and emphasises the importance of endoscopic assessment in acute odynophagia.

Corresponding author: Robert O'Neill, rone1111@outlook.com

Conflicts of interest: None to declare.

REFERENCES

1. Hoversten P, Kamboj AK, Katzka DA. Infections of the esophagus: an update on risk factors, diagnosis, and management. *Dis Esophagus* 2018;31:doy094. doi:[10.1093/dote/doy094](https://doi.org/10.1093/dote/doy094)
2. Ramanathan J, Rammouni M, Baran J Jr, Khatib R. Herpes simplex virus esophagitis in the immunocompetent host: an overview. *Am J Gastroenterol* 2000;95:2171-2176. doi:[10.1111/j.1572-0241.2000.02299.x](https://doi.org/10.1111/j.1572-0241.2000.02299.x)
3. Génereau T, Rozenberg F, Bouchaud O, Marche C, Lortholary O. Herpes esophagitis: a comprehensive review. *Clin Microbiol Infect* 1997;3:397-407. doi:[10.1111/j.1469-0691.1997.tb00275.x](https://doi.org/10.1111/j.1469-0691.1997.tb00275.x)
4. Canalejo E, Durán FG, Cabello N, Martínez JG. Herpes esophagitis in healthy adults and adolescents: report of 3 cases and review of the literature. *Medicine* 2010;89:204-210. doi:[10.1097/MD.0b013e3181e949ed](https://doi.org/10.1097/MD.0b013e3181e949ed)
5. Corey L, Spear PG. Infections with herpes simplex viruses. *N Engl J Med* 1986;314:686-691. doi:[10.1056/NEJM198603133141105](https://doi.org/10.1056/NEJM198603133141105)