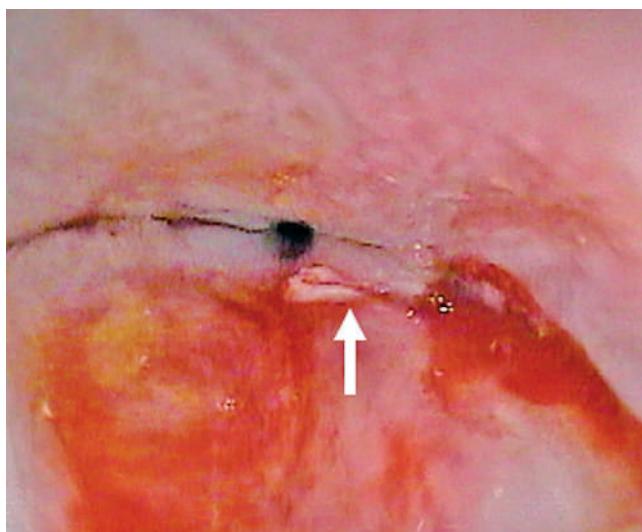
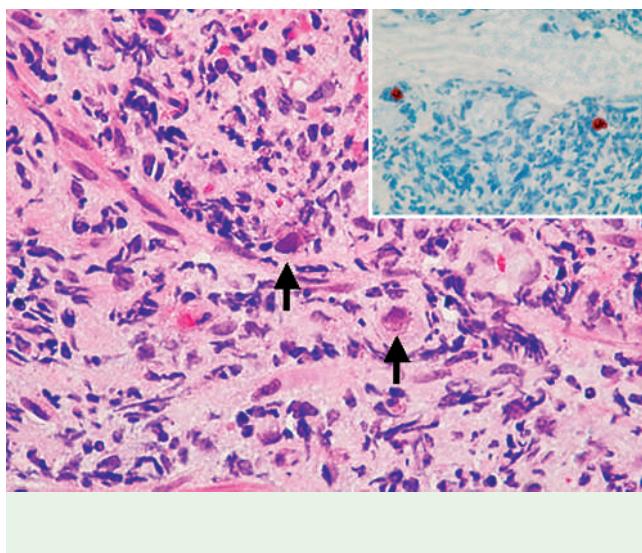


## Cytomegalovirus esophagitis preceding the diagnosis of systemic lupus erythematosus



**Figure 1** Endoscopic photo of the upper esophageal mass. A firm, erythematous, indurated mass was noted 3 cm below the upper esophageal sphincter, with a central ulcerated prominence touching the opposite wall (white arrow). Biopsies from this lesion showed positive cytomegalovirus immunohistology.



**Figure 2** Histology of the upper esophageal mass. Biopsies demonstrated fibrinopurulent exudate and dense mixed inflammatory infiltrate, composed of lymphocytes, plasma cells, neutrophils, eosinophils, and histiocytes. Occasional large cells containing enlarged nuclei with smudged chromatin and abundant granular cytoplasm could be seen (arrows); these cells were positive for cytomegalovirus immunohistochemical stain (inset).

Human cytomegalovirus (CMV) is an infectious Herpes virus that is carried by 70%–100% of the world's population, where the symptoms are usually subclinical [1]. In contrast, immunocompromised individuals may develop a variety of syndromes. For example, gastrointestinal manifestations include esophagitis, colitis, and hepatitis [2].

CMV can disrupt central cellular and immunological functions and has been proposed to initiate or augment inflammatory diseases such as systemic lupus erythematosus (SLE) [3]. We present a unique case of CMV esophagitis preceding the diagnosis of SLE.

A healthy Hispanic 15-year-old female presented with a 1-month history of dizziness,

palpitations, weight loss, and diarrhea. She was diagnosed with thyrotoxicosis and received subsequent thyroid ablation. Two weeks after ablation she developed weight loss, fever, decreased appetite, and dysphagia. She had a prolonged hospitalization, during which her erythrocyte sedimentation rate (ESR) and total IgG were elevated. CMV IgM and IgG were positive. Esophagogastroduodenoscopy (EGD) revealed an upper esophageal mass (► Figure 1). Biopsies from this area were positive for CMV with immunohistochemical staining (► Figure 2). She was treated with a 3-week course of gancyclovir, and improved.

The patient was well for 2 months and then developed progressive diffuse joint

pains and weight loss over a 3-month period, at the end of which daily fevers developed. The clinical picture and serologic evaluations were consistent with SLE. She was treated with corticosteroids and improved.

CMV infection itself has been implicated as a potential triggering factor for SLE, but esophagitis has not been reported in this respect [4]. Our case highlights the rarity of CMV-related esophagitis in the pediatric population, underscoring the importance of immunologic and rheumatologic evaluation for serious CMV infections in children.

Endoscopy\_UCTN\_Code\_CCL\_1AB\_2AC\_3AZ

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DOI 10.1055/s-2007-966425

Endoscopy 2007; 39: E218

© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

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