ADVANCES IN GERD

Current Developments in the Management of Acid-Related GI Disorders

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Infectious Esophagitis

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G&H What are the causes of infectious esophagitis and with what other disease states is it associated?

CMW The primary infectious causes of esophagitis are fungal and viral. There are also case reports of bacterial esophagitis and esophagitis caused by parasites, but these are quite rare. The most common fungal infection causing esophagitis, and the most common form of infectious esophagitis overall, is Candida esophagitis. Viral esophagitis is generally caused by one of two viruses: herpes simplex virus or cytomegalovirus.

The patient populations affected by esophageal infections are those that are in some way immunocompromised. These include transplant patients, patients receiving radiation therapy, and, depending on their treatment, HIV-infected patients. A decade ago, the latter group comprised the vast majority of infectious esophagitis patients but with the advent of highly active antiretroviral therapy (HAART) to treat HIV and AIDS, the overall number of patients presenting with infectious esophagitis has fallen dramatically.

G&H Is infectious esophagitis ever seen in otherwise healthy individuals?

CMW There are occasional reports of infectious esophagitis in healthy individuals but in these cases the presence of some subtle systemic immunodeficiency or a factor causing esophageal immunodeficiency is likely. One example is in patients with an esophageal stricture from achalasia. In these patients, the esophagus does not empty normally, thus compromising the esophageal defense mechanisms. These patients can occasionally develop Candida esophagitis. Healthy individuals taking antibiotics can also develop Candida esophagitis but these patients often have a complicating condition such as diabetes. A diabetic patient with poorly controlled hyperglycemia can develop Candida esophagitis but diabetes in combination with antibiotics would place the patient at much higher risk for infection.

It is very rare that viral esophagitis from acute herpes simplex or cytomegalovirus will occur in a healthy individual. These etiologies, particularly cytomegalovirus, are almost exclusively associated with severe immunocompromise.

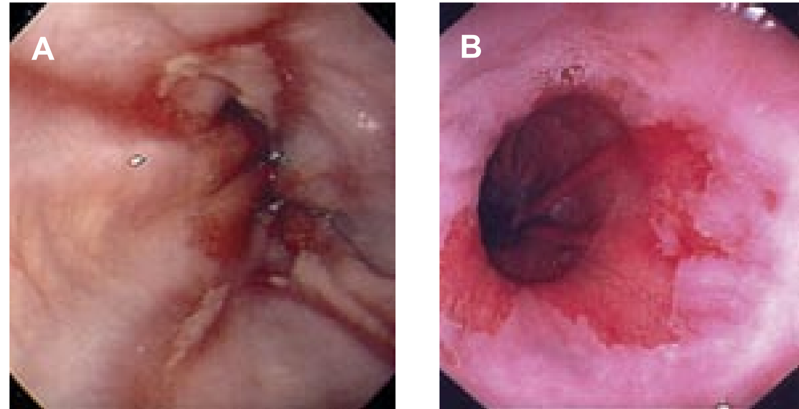
G&H How is infectious esophagitis differentiated from reflux esophagitis?

CMW There is little symptomatic overlap between infectious esophagitis and reflux esophagitis. Reflux, for the most part, manifests in the chest as heartburn or in the throat as regurgitation. Infectious esophagitis presents symptomatically as a difficulty with swallowing saliva. Patients with severe esophagitis with deep ulceration will develop painful swallowing or odynophagia, regardless of the cause, but Candida esophagitis generally causes dysphagia, or slow movement of food bolus through the esophagus. From a diagnostic standpoint, if a patient has classic reflux symptoms and very painful swallowing, it may be severe erosive esophagitis. However, if the same patient is at risk for infection (eg, an AIDS patient, a cancer patient, a diabetic patient taking antibiotics), a physician should suspect an infection instead of reflux.

G&H Do reflux and infectious esophagitis appear differently on endoscopic examination?

CMW Yeast (Candida) esophagitis, and esophagitis from herpes and cytomegalovirus generally appear very dissimilar from classic reflux (Figures 1 and 2). Occasionally, they may look the same on endoscopic examination, but, in the case of an immunocompromised patient with an esophageal ulcer, biopsy should be performed regardless, to rule out infection.

Figure 1. Endoscopic views of reflux esophagitis (A) and Barrett esophagus (B).



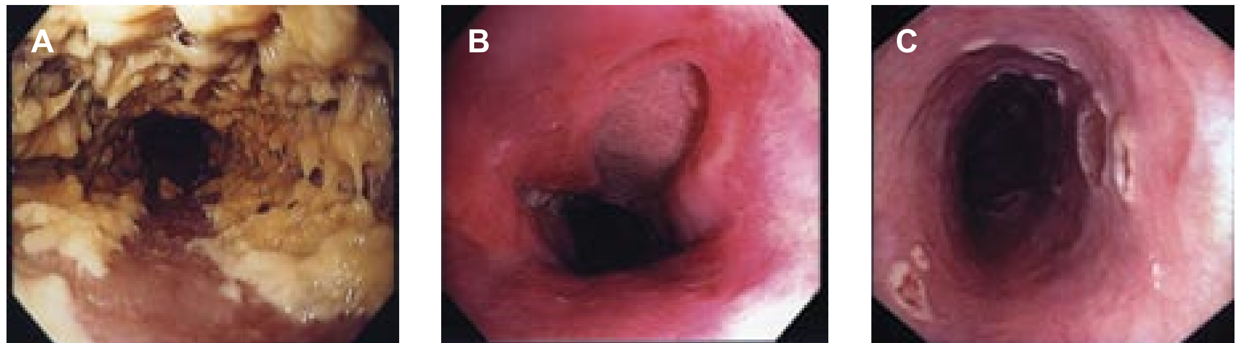


Figure 2. Endoscopic views of severe Candida esophagitis (A), Cytomegalovirus ulcer (B), and herpes-simplex viral esophagitis (C).

G&H How does infectious esophagitis treatment differ from reflux esophagitis?

CMW All reflux esophagitis can be treated with a wide variety of antacid drugs—proton pump inhibitors most commonly. In infectious esophagitis, the treatment needs to be matched to the type of infection and it is critical to determine the cause of infection in order to treat successfully. Yeast infections require antifungal treatment. Viral infections must be differentiated between those caused by herpes and those caused by cytomegalovirus and treated accordingly. If the patient is immunocompromised, or has some other medical-therapy or disease factor that can be ameliorated, the appropriate steps should be taken to do so. Diabetic patients should have their glycemic levels controlled and should be taken off antibiotics if possible. AIDS patient should be receiving HAART. Transplant patients should be on a reduced dose of immunosuppressive medications, if possible.

G&H Does infectious esophagitis generally resolve with treatment?

CMW With the correct diagnosis, treatments fully resolve the infection without any residual effects, even if the patient remains severely immunocompromised.

G&H What is the risk of recurrence of infectious esophagitis in these patients?

CMW If patients remain in an immuocompromised state, most of these infections will relapse and they may therefore require long-term antibiotic therapy until the patient's immune function improves.

G&H Are there consequences beyond symptoms in patients with chronic infection?

CMW Generally, the symptoms alone will persist but chronic infectious esophagitis can, in some cases, cause stricture or a particular condition seen in AIDS patients called an idiopathic esophageal ulcer, which can result in an esophageal stricture with ulcer healing.

Suggested Reading

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