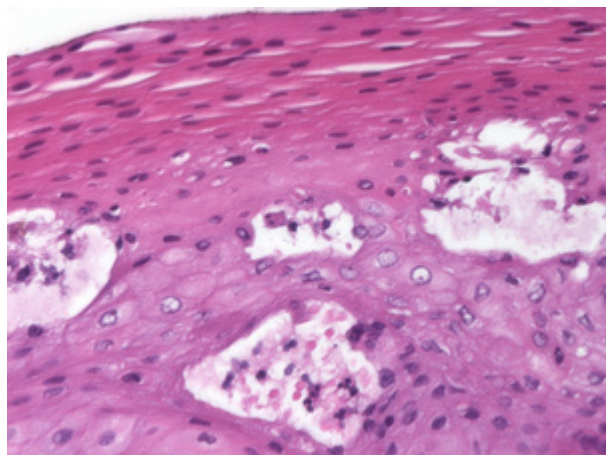
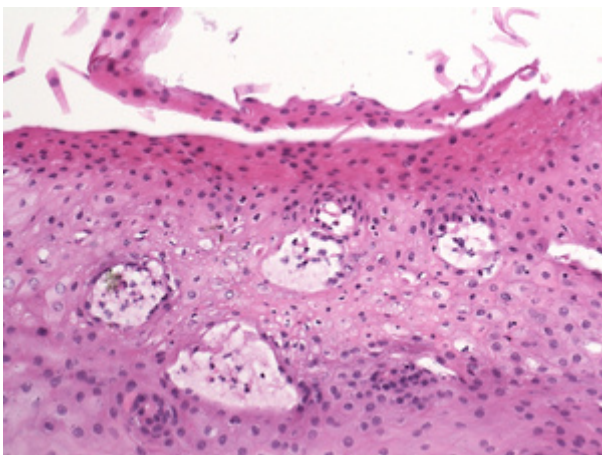
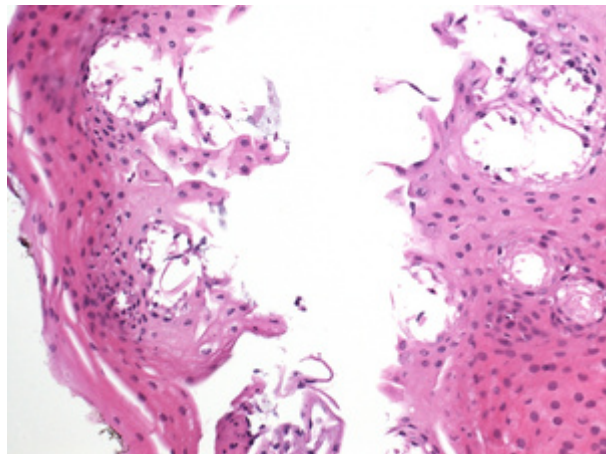
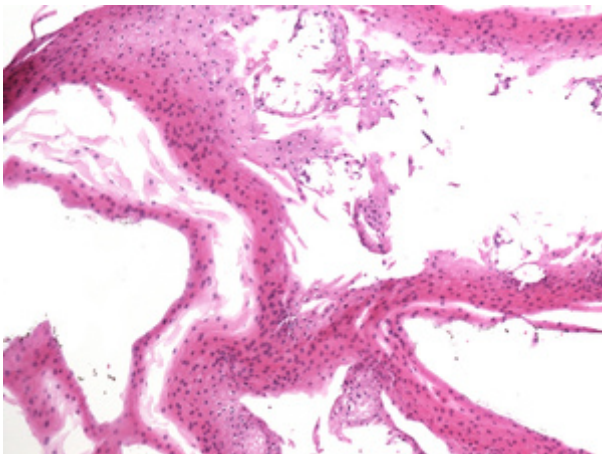
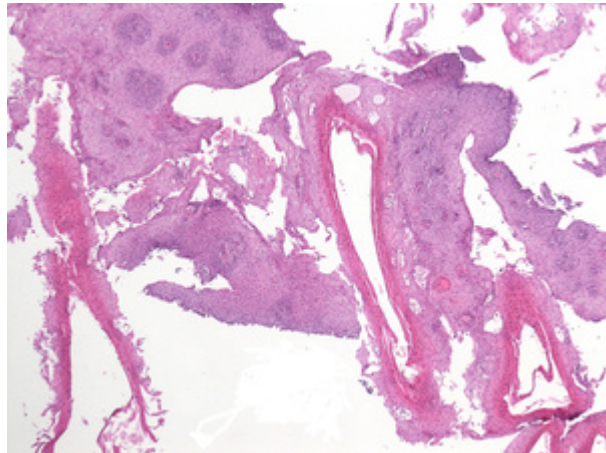


April 2014

Oesophageal biopsy material from an 82-year-old female.

What is your diagnosis?



Diagnosis

Sloughing oesophagitis.

Comment

Endoscopy shows sloughing plaque-like membranes in the distal oesophagus (Panel A). Upon histology, necrosis and detachment of the upper half of the epithelium is seen. The underlying intact squamous epithelial cells appear reactive. The superficial squamous epithelial cells contain flattened dark nuclei, mimicking

parakeratosis. Vacuolisation and pockets of granulocytes are present at the interface of the necrosis and intact mucosa (Panel B-F).

Sloughing oesophagitis, also known as oesophagitis dissecans superficialis, is defined by white plaques and sloughing membranes (more rarely exudates, erosions, ulcers, webs...) due to extensive superficial necrotic squamous epithelium, that have characteristic "sloughing" appearance on endoscopy. These plaques are usually located in the distal or mid part of the oesophagus, but they also could be limited to the proximal oesophagus or could involve the entire oesophagus.

Sloughing oesophagitis, histologically, is characterized by a classical "two-toned" appearance of the epithelium on H&E:

- › The most superficial part of the squamous epithelium is strongly eosinophilic and partially or completely detached from the underlying mucosa. Necrosis is here a constant finding. The nuclei could be pyknotic (resembling parakeratosis of the skin) or faded ("ghost nuclei").
- › Conversely, in the underlying intact epithelium the presence of associated basal cell hyperplasia or reactive changes (with hyperchromatic nuclei and prominent nucleoli), impart a more basophilic morphology.

A zone of oedema and a band-like infiltrate of neutrophils (with varying degrees of intensity) is present at the interface between the necrotic and the deeper layers.

Sloughing oesophagitis usually affects elderly people and chronically debilitated patients (for example hospitalized, immunosuppressed, bedridden, with metastatic cancers). Some of these subjects are affected by bullous dermatoses (pemphigus or pemphigoid). Often they take multiple medications, especially central nervous system depressants (narcotics, benzodiazepines), nonsteroidal anti-inflammatory drugs (NSAIDs) or drugs known to cause oesophageal injury (iron, 5-ASA, potassium chloride). Of note, our patient had received different psychiatric drugs (Flunitrazepam, Flupentixol, Melitracen), and also cardiovascular medications (Diltiazem, Enalaprilmaleat, Hydrochlorothiazid).

The most common symptoms are upper gastrointestinal bleeding, dysphagia, nausea, vomiting, difficult swallowing and heartburn.

For further reading

- › Purdy JK, Appelman HD, McKenna BJ. Sloughing esophagitis is associated with chronic debilitation and medications that injure the esophageal mucosa. *Mod Pathol.* 2012;25:767-75.
- › Carmack SW, Vemulapalli R, Spechler SJ, Genta RM. Esophagitis dissecans superficialis ("sloughing esophagitis"): a clinicopathologic study of 12 cases. *Am J Surg Pathol.* 2009;33:1789-94.
- › Albert DM, Ally MR, Moawad FJ. The sloughing esophagus: a report of five cases. *Am J Gastroenterol.* 2013;108:1816-7.

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