

Sebaceous Glands in Esophagus of a Patient with Gastroesophageal Reflux Disease

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Citation

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Abstract

Sebaceous glands in esophagus are very rare and have been reported mostly in autopsy studies. Only a few cases have been reported in living persons and have been considered of no clinical significance. Rarely have been these lesions diagnosed by endoscopy and biopsy. (1) We report a unique case of sebaceous gland in esophagus in a male which was diagnosed by endoscopy and biopsy. To our knowledge this is the second reported case of sebaceous glands in esophagus of a patient with gastroesophageal reflux disease.

BACKGROUND

Sebaceous glands arise in close association with hair follicles to form the pilosebaceous apparatus. Sebaceous glands are only found in lips and oral cavity. (2) Ectopic sebaceous glands have been reported in a variety of sites including genitals, eyes, orbits, nipples, palms, soles and parotid glands. (3) Sebaceous glands in esophagus are interesting because of their doubtful embryonic origin. Several hypothesis have been postulated to explain sebaceous glands in various sites including developments defect and metaplasia. The absence of sebaceous glands in esophagus of children. (4) and their presence in adults could be indicative of metaplastic process.

CASE REPORT

A 50 year old obese white male with history of hypertension, asthma, depression, gastroesophageal reflux disease, colonic polyps and hypercholesteremia came to our clinic complaining of two month history of epigastric pain along with burning and acid regurgitation. He denied any other symptoms including dysphagia or odonophagia. Results of physical examination and routine laboratory tests were unremarkable. Endoscopy was done which revealed reflux esophagitis and hiatal hernia along with multiple nodules presumed to be esophageal cysts which were scattered throughout the esophagus. Biopsy revealed fragments of squamous esophageal mucosa showing sebaceous gland formation. These glands consisted of units of large polyhedral cells with clear vacuolated cytoplasm. Each unit was delineated by a small basement membrane. A small

collection of inflammatory cells were present in the vicinity of sebaceous glands.

DETAILS OF BIOPSY

Esophageal sebaceous gland, endoscopic biopsies, preserved in glycolated alcohol-based fixative, paraffin embedded, stained with H&E.

Figure 1

Slide 1: low power view of esophageal squamous epithelium with underlying sebaceous gland

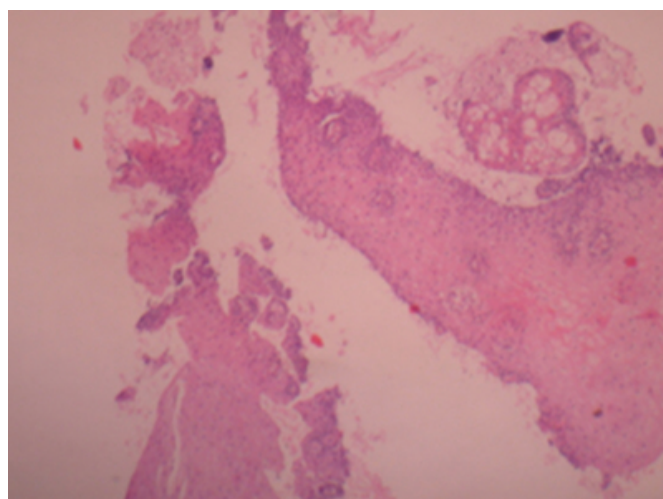
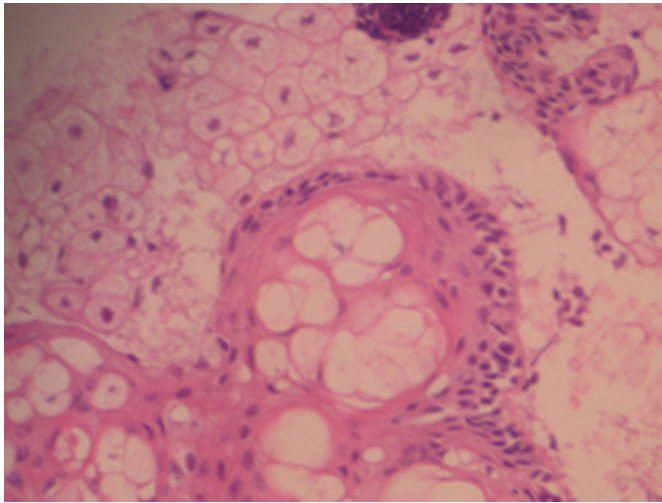


Figure 2

Slide 2: higher power view of sebaceous gland consisting of foamy lipid filled cells and associated cuboidal/squamoid epithelium



Patient was started on PPI therapy and he seemed to do well.

DISCUSSION

Sebaceous glands were first described as a histological postmortem finding by Dela Pava and Pickren⁽⁵⁾ in 4 out of 200 autopsy subjects and by Pianzole et al⁽⁶⁾. Ramakrishnan and Brinker described the first case in 1976.⁽⁷⁾

Approximately 21 cases have been reported since then.

Some cases of heterotropic sebaceous glands in esophagus have been reported to have gastroesophageal reflux disease^(8,9) and symptoms of chronic esophagitis. Merino et al⁽⁸⁾ reported sebaceous gland in 38 year old women with symptoms of gastroesophageal reflux disease and concluded that most probably sebaceous glands were heterotropic and their findings were incidental and fortuitous with no relationship to patient's symptoms. The esophageal sebaceous glands should be differentiated from other sub

mucosal tumors and mucosal proliferative lesions. Although our patient complained of reflux but not all the clinical and endoscopic findings of gastroesophageal reflux disease were identified which raises an important question whether there is any relation between these esophageal sebaceous cysts and gastroesophageal reflux disease. It is also likely that esophageal sebaceous glands were heterotropic and their relation to the clinical setting of gastroesophageal reflux disease was purely fortuitous. Our patient had inflammatory reaction which suggests that heterotrophic sebaceous glands in some patients are associated with chronic inflammation such as reflux esophagitis. These possibilities should be considered in future evaluation of esophageal biopsies in patients with gastroesophageal reflux disease. Further studies are required to elucidate the causes and clinicopathological significance of such an unusual epithelial change.

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