*Letter to the editor***Diabetes mellitus and its association with esophageal disorders besides motility dysfunction**

To the Editor: I read with great interest the recent article by Kinekawa et al.¹ The authors have shown a clear and significant relationship between diabetes and the gastroesophageal reflux as well as esophageal motility dysfunction. Interestingly, while esophageal research in diabetics focuses mostly on motility dysfunction, it is often forgotten that diabetic patients are at a higher risk for a number of other esophageal disorders besides motility dysfunction.

For instance, nearly 28% of patients who develop “black esophagus” have underlying diabetes mellitus.² The increased incidence of gastroesophageal reflux as well as candidal infections in diabetics are some of the aggravating factors that contribute to this increased incidence in diabetic patients. Besides this, a number of structural changes occur in the esophagus in diabetic patients. For instance, increased mucosal as well as submucosal thickness of the esophageal wall occurs commonly and contributes further to the altered esophageal motility.³ Similarly, diabetic patients with secondary autonomic neuropathy have an increased incidence of esophagitis.⁴ Obesity is another major altered parameter noticed in diabetic patients. This factor is significant because obese individuals with a body mass index of more than 30 are almost 4 times as likely as nonobese individuals to develop Barrett’s esophagitis.⁵ In fact, Kuriki et al., in a recent Japanese study, have demonstrated that males with diabetes are almost 1.7 times more likely to develop esophageal carcinoma in comparison to nondiabetics.⁶

A similar close connection exists between diabetes and esophageal candidiasis. For instance, several cases have been reported by Takasawa et al. and other researchers in which underlying diabetes was the only predisposing factor for the development of esophageal candidiasis.⁷ In fact, esophageal candidiasis can be so severe that it worsens underlying diabetes, especially type 1 diabetes.⁸ A close connection also exists between esophageal dysfunction and cardiac function in diabetic patients. For instance, nearly half the diabetic patients with cardiovascular autonomic neuropathy (CVAN) demonstrate spontaneous esophageal waves in comparison to a prevalence of only 7% in diabetic patients without CVAN.⁹ As a result, diabetic patients with concurrent CVAN are more likely to develop impaired lower esophageal sphincter relaxation. Similarly, diabetes may be associated with other esophageal conditions such as nutcracker esophagus, although an exact etiopathogenic connection has not been established.¹⁰

Clearly, diabetes is associated with an increased incidence of a number of severe esophageal pathologies ranging from “black esophagus” to CVAN. There is a need for increasing awareness about these conditions among gastroenterologists so that they can watch out for these conditions when screening patients with underlying diabetes.

Shailendra Kapoor
Schaumburg, IL 60195, USA

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Reprint requests to: S. Kapoor

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