



# Find Out the Differences by Types of Hiatal Hernia!

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**Article:** Morphology of the esophageal hiatus: is it different in 3 types of hiatus hernias?

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Hiatal hernia is a status that some upper part of the stomach bulges up into the thorax through that opening.<sup>1</sup> It is known as hiatal hernia is asymptomatic. However, hiatal hernia may allow gastric contents to reflux into the distal esophagus more easily, is closely related with gastroesophageal reflux disease development and aggravation.<sup>2</sup>

Traditionally, hiatal hernias is divided into 2 types: sliding and paraesophageal hernia. In a sliding hiatal hernia, the stomach and the section of the esophagus that joins the stomach slide up into the chest through the hiatus. This is the more common type of hernia. The paraesophageal hernia is less common, but is more cause for concern. The esophagus and stomach stay in their normal locations, but part of the stomach squeezes through the hiatus, landing it next to the esophagus.

Mittal et al<sup>3</sup> divided the hiatal hernia to 3 types, type 1 (sliding hiatal hernia) is when the esophagogastric junction (EGJ) and stomach is located above the diaphragmatic hiatus and the EGJ is located above the gastric fundus, type 2 (paraesophageal hiatal hernia) is when the EGJ is located at or below the level of diaphragmatic hiatus and part of the stomach alongside the esophagus (> 2 cm), above the diaphragm. Type 3 (mixed, sliding, and para-

esophageal hiatal hernia) is the EGJ and stomach is located above the diaphragm and 2 cm or more of the fundus is located cephalad to the lower esophageal sphincter and esophagus.<sup>3</sup>

Hiatal hernia types were compared with the data of clinical basic characteristics, high-resolution manometry (HRM) findings, and CT findings. The results of CT scan images gave the anatomical differences, of HRM findings and HRM findings show the functional differences, even the clinical data did not provide the different results.

Although this article is not a masterpiece of research in this research field, it suggests a new scientific approach methodology to hiatal hernia with gastroesophageal reflux disease studies and is expected to serve as a flint for future research.

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