Aim: "A new original laparoscopic operative technique was used to suture paraesophageal hernia (PEH) with the strips of mesh.

Material and Methods: The Mercilen (MercilenTM) mesh suture was used to close large hiatal hernia. The strips of mesh, instead of normal thread, were applied to close the gap between diaphragm’s crura in 12 patients with hernia defect more than 5 cm. Mesh suture were tighten as a simple laparoscopic intracorporeal knot. The surgical technique and surgical outcomes are presented.

Results: 12 patients underwent a laparoscopic PEH suturing with Mercilen strips of mesh. We recorded no recurrence or dysphagia at 6 and 12 months follow-up.

Conclusions: Mesh-sutured repairs of diaphragm’s hernia support the concepts of force distribution and resistance to suture pull through. The new original technique avoids using the sheet of mesh and enables to reduce the amount of dangerous complications connected with mesh and its fixation. Mesh-sutured closures of hiatal hernias seem to be safe and effective in tension closure of large hiatal defects. Further investigations are needed to evaluate the results.

Using the mesh suture technique for the closure of large PEH, we protect the cruras from being cutting through. Besides, the mesh stripes and its knots produce tissue scarring around the esophagus making the suture line stronger.

Supplementary material

Supplementary material is available at BJS online.