

Needlescopic Splenectomy: A Safer Alternative to Single Incision Laparoscopic Splenectomy (SILS)

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Sir,

I read with interest the article authored by Barbaros and Dincceg on “Single Incision Laparoscopic Splenectomy: The first two cases.”¹ The authors claimed that current efforts aimed at reducing morbidity associated with minimally invasive surgery have been due to two “recent innovations” being developed, including transumbilical surgery with one very large port having three working channels, or three ports within the umbilicus, called single incision laparoscopic surgery (SILS).

The authors may have been unaware of the interim development of needlescopic surgery in the mid-90s, in which a major umbilical trocar of 12 mm is used for vision, stapling, clipping, energy sources, and extraction sites, whereas 2 mm or less instruments are used in the periphery (i.e., subcostal left for a splenectomy) for retraction.² A needlescopic endoscope was used when the umbilical channel was used for major work. This concept is the same as the transumbilical endoscopic surgery or SILS used in many recent publications, with the exception that additional needlescopic instruments used permits triangulation in surgical complex tasks, conferring a safer surgical dissection. Even in many publications of SILS nowadays, needlescopic instruments are often added to complement the surgical tasks. Indications for splenectomy of this type remain most likely in the domain of smaller spleens, benign disorders, and cysts. Splenic cysts can be marsupialized nicely with only a 12- or even 5-mm umbilical trocars with two or three (2–3 mm) trocars in the left subcostal area.³

My personal experience of needlescopic splenectomy, which started at the Cleveland Clinic in 1996, has demonstrated that in five cases (torsion, ITP, cyst, hereditary spherocytosis, and lymphoproliferative disorder), the mean

operative time was 90 min compared to 186 min in 29 laparoscopic conventional splenectomies, the estimated blood loss had been reduced by a magnitude of fivefold, followed by a faster oral intake and shorter hospital stay (1.0 versus 5.5 days). The scar after needlescopic surgery is very negligible and non-existent after 12 months, achieving similar cosmetic results to SILS (even better if the umbilical scar in SILS has been extended in the periumbilical sphere).⁴

Further, I would argue that pain scores (no narcotics necessary!) maybe the same or better than SILS, due to higher trauma to the periumbilical area in single port surgery using diameters reaching >20 mm.⁵ Finally, the long-term herniation risks in the periumbilical area will be exponential to the diameter of umbilical destruction (much higher in SILS) and will require a mesh repair at a later time. This mesh repair will, undoubtedly, prevent another SILS in the future.

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The authors were given the opportunity to respond to this Letter to the Editors, and declined.