A Report on the Introduction of the EZ DASH Lap into Clinical Use

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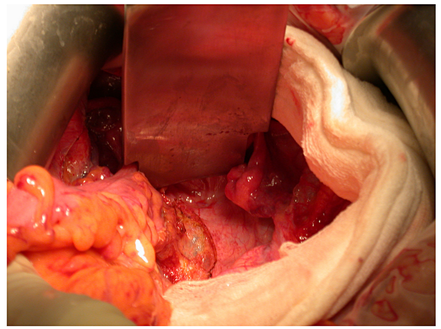
Background

The EZ DASH (Disposable Absorbent Secure Hold) lap/retractor combines the advantages of an absorbent lap pad with the security of a flexible, moldable system for dedicated retraction. The device is composed of two elements, an outer "lap" pad, consisting of 12 thicknesses of absorbent cotton, and internally, a stainless steel mesh surrounded by a silastic coating and border to ensure patient safety. The device may be molded, and even re-shaped, to a variety of configurations needed within the chest, abdomen or pelvis for retraction. It is versatile, and is easily deployed, and may be used in any of the above surgical specialties. EZ DASH may be used in conjunction with many retractor systems. Currently, the mesh is manufactured at two levels of resiliency, and the device comes in five sizes, varying from 2X7 inches, to 4X7 inches, to 7X11 inches. Sizers may be developed.

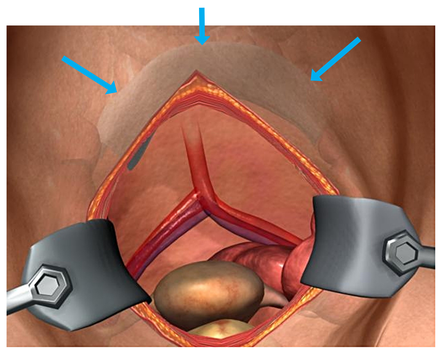
Methods

We have introduced the EZ DASH into use in General Surgery and Gynecologic Oncology, and have extended its use to Thoracic and to anterior access in Spine Surgery. In General Surgery, it was easily adapted to use in three locations, the pelvis, various locations in the abdomen, and in the sub-hepatic space. In the pelvis, in hysterectomies, the 4X7 device was folded tightly lengthwise into a double-folded 2X7, and then curved to a crescent curve or half-moon. The small bowel was displaced into the upper abdomen and the folded and curved lap/retractor positioned under the abdominal wall and just above the umbilicus, preventing the small bowel from finding its way back into the pelvis. The midline incision, using less retraction above the umbilicus, assisted as it helped to secure the DASH under the abdominal wall. With the displacement of the small bowel, a simple retractor, e.g., a Balfour, provided easy access to the pelvis.

EZ DASH in Use During LAR



EZ DASH in place during a Hysterectomy



Results

An Evaluation period has been carried out at a number of major medical centers. The EZ DASH evaluations have been reported in 152 cases; 17 at the Beth Israel Medical Center in New York, 14 at St. Mary's Nazareth in Chicago, 13 at Barnes Hospital and affiliated hospitals in St. Louis, 12 at the Central Mississippi Medical Center in Jackson, and smaller numbers at other institutions. The product was employed in 61 hysterectomies, 35 colon resections, 14 LAR's or APR's, 13 Whipple procedures or liver resections, and in assorted other procedures. It was used in thoracic, vascular and spine access surgery, as well. The most common sizes used were size 2, (4X7) in 81 cases, size 3 (4X11) in 71 cases, and 2 or more units were required in only 12 cases (8%). 132 procedures (87%) were performed using only one unit per case. In 26 cases (17%) performed by 13 surgeons (8.6%), "sizers" were deemed to have a potential role in choosing the right size unit.

In 107 of the 152 (70%) cases, the surgeons found the device very easy (grade 1 on a scale of 1-5 degrees of difficulty) to insert the EZ DASH properly into the abdomen. Often it was deemed "intuitive." 140/152 (92%) cases were scored either a level 1 or 2 out of 5 for insertion. In 63 cases (41%), surgeons readjusted the position of the EZ DASH, mostly (55 cases or 87%) because the procedure, itself, demanded a change of exposure. In the opinion of 139/152 surgeons (91.4%), operating room time was saved as a result of using EZ DASH. 62 surgeons reported saving < 5 minutes (41%), 58 between 5-10 minutes (38%), and 19 (12.5%) reported saving 10 or more minutes. In 139/152 (40%) of cases, surgeons felt that appreciably fewer laps were required because the EZ DASH was being used.

A sense of the "value added" by the device was requested after each use. On a scale of 1-5, 134 surgeons (88%) felt that the device added a high measure of value to the case (a score of 1 or 2). Ten surgeons felt that there was no value added. Nevertheless, despite any misgivings, when asked whether they want the product in their OR's, 144/152 (95%) wanted it brought in for their continued use.

Conclusion

EZ DASH has been well-received dturing an evaluation period. Suggestions concerning additional shapes, ribbon markers, etc., are being implemented.

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