STOP GAP®
Suture device for laparoscopic surgery

The STOP GAP® is a device for the application of preventive sutures through the entire thickness of the abdominal wall, for closure of access points of the trocar used for laparoscopic surgery. The device is introduced through any size trocar of 5 mms Ø and higher, under direct observation on the video monitor.

The ease and rapidity of use with the STOP GAP®, besides offering the evident benefits to the Medical personnel and the patient, offers a rapid and efficient solution to the possible problems of haemorrhaging, hernias, adherences.

**Characteristics**

STOP GAP® is a tubular structure of 5 mms in diameter which can pass through a trocar of any size. This tubular structure has a longitudinal window which, upon moving the double ring guide runners up, allows the hollow needle containing the suture thread to exit from the guide chamber once the instrument has been introduced and positioned in the peritoneal cavity. By virtue of the particular hook form of the hollow needle, the suture passes through the abdominal wall, from the peritoneal cavity to the skin surface by simply pulling the device towards the outside while holding it by the handle. The hollow needle which protrudes from the window is a solid and integral part of the handle.

The movement of the double ring guide runners, permits the hollow needle to open out during the operative phase, and return to the guide chamber during the introduction of the device through the trocar. Within the handle cavity there is a suture thread dispenser, which supplies thread along the internal tubular structure to the hollow needle, and is of a sufficient length to place the number of sutures usually necessary during laparoscopic surgical procedures performed on one patient.

Manufactured in medical grade steel AISI 304 and ABS.
1. In the “closed” position, introduce the instrument through the trocar (Figure 1). During use of the STOP GAP it is important that the trocar, which is used to insert the device, is only inserted through the abdominal wall just far enough necessary in order to guarantee easy perforation of the skin by the STOP GAP needle. It is also absolutely necessary to avoid accidental removal of the entire trocar. This would cause rapid disappearance of the pneumoperitoneum, with subsequent adhesion of the intestines to the abdominal wall and consequent impossibility to view the STOP GAP on the monitor, which must be constantly controlled to avoid any type of lesion.

2. Under direct observation on the monitor, and with the tip of the instrument adequately introduced into the peritoneal cavity in order to permit the needle to open out of the guide chamber, slide the double ring guide runner forward to the “open” mark, which places the needle in the ready position to pierce the abdominal wall from the inside. The utmost precaution should be taken to guarantee that no internal organs or viscera are present in the area of the needle opening, in order to avoid unintentional wounds, especially in the event that the needle is released quickly rather than gradually (Figure 2).

3. Pierce the abdominal wall by exerting traction on the handle, while maintaining the “open” position. The needle must pass through the skin surface. This may be facilitated by using the ring of a pair of scissors or similar to maintain the skin taut and exert counter pressure as the needle passes through the skin. Grasp the tip of the suture thread with a Klemmer instrument (Figure 3).

4. Reintroduce the needle to the inside of the peritoneal cavity to a length which is slightly longer than the thickness of the abdominal wall, in order to create enough slack in the suture thread, which is necessary for the correct placement of the following suture point. Under direct observation, turn the instrument so as to position the tip of the needle in a diametrically opposite position from the preceding point of exit. Pierce the skin surface in order to allow the needle to again expose the suture thread, as in the previous step. Having extracted a sufficient length of thread, cut and take hold of the end of the thread with another Klemmer, making sure to conserve a sufficient length of thread coming out of the needle to position the next suture point (Figure 4).

5. Reintroduce the tip of the instrument into the peritoneal cavity. Move the double ring guide runner backward to the “closed” position so that it can be extracted from the trocar and is ready to be introduced for the next suture point in another trocar. Repeat the preceding steps (Figure 5).

6. At the conclusion of the operation, after the trocars have been extracted, free the suture thread ends from the Klemmers (which were applied to avoid them slipping back inside the peritoneal cavity) and knot them, possibly around a tampon. A small suture point may be applied to the lips of the skin wound (Figure 6).

STOP · GAP® is loaded with 140 cms. of MED-LON® suture thread (NYLON monofilament) in the following sizes:

<table>
<thead>
<tr>
<th>Size</th>
<th>Code</th>
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<tbody>
<tr>
<td>0 (3.5 metric)</td>
<td>CODE SG P.00.00.01</td>
</tr>
<tr>
<td>1 (4 metric)</td>
<td>CODE SG P.00.1.01</td>
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</tbody>
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Sterilized by gamma rays, double sterile packaging, 5 pcs. per box.