Stomach and Small Intestine

- Little controversy exists regarding the repair of injuries to the stomach or small bowel because of a rich blood supply.

- Gastric wounds can be oversewn with a running single-layer suture line or closed with a stapler.

- If a single-layer closure is chosen, full-thickness bites should be taken to ensure hemostasis from the well-vascularized gastric wall.

- The most commonly missed gastric injury is the posterior wound of a through and through penetrating injury.

- Injuries also can be overlooked if the wound is located within the mesentery of the lesser curvature or high in the fundus.

- To delineate a questionable injury, the stomach can be digitally occluded at the pylorus while methylene blue-colored saline is instilled via a nasogastric (NG) tube.

- Alternatively, air can be introduced via the NG tube with the abdomen filled with saline.

- Partial gastrectomy may be required for destructive injuries, with resections of the distal antrum or pylorus reconstructed using a Billroth procedure.

- Patients with injuries that damage both Latarjet nerves or vagi should undergo a drainage procedure .

- Small intestine injuries can be repaired using a transverse running 3-0 PDS suture if the injury is less than one-third the circumference of the bowel.

- Destructive injuries or multiple penetrating injuries occurring close together are treated with segmental resection followed by end-to-end anastomosis using a continuous, single-layer 3-0 polypropylene suture.

- Mesenteric injuries may result in an ischemic segment of intestine, which mandates resection.

- Following repair of GI tract injuries, patients may develop a postoperative ileus. Return of bowel function is indicated by a decrease in gastrostomy or nasogastric tube output.

- Multiple studies have confirmed the importance of early total enteral nutrition (TEN) in the trauma population, particularly its impact in reducing septic complications.

- Although early enteral nutrition is the goal, evidence of bowel function should be apparent before advancing to goal tube feedings.

- Overzealous jejunal feeding can lead to small bowel necrosis in the patient recovering from profound shock.

- Patients undergoing monitoring for nonoperative management of grade III or higher solid organ injuries should receive nothing by mouth for at least 48 hours in case they require an operation.

- Although there is general reluctance to initiate TEN in patients with an open abdomen, a recent multicenter trial demonstrates that TEN in the postinjury open abdomen is feasible.

- For those patients without a bowel injury, TEN was associated with higher fascial closure rates, decreased complications, and decreased mortality.

- Once resuscitation is complete, initiation of TEN, even at trophic levels (20 mL/h), should be considered in all injured patients with an open abdomen.