Treatment options for perforated peptic ulcer:

Principles of conservative treatment include nasogastric suction, pain control, antiulcer medication, and antibiotics. Nonsurgical treatment has been recognized for a long time. The first major series was published by Taylor nearly 50 years ago; it reported a mortality rate of 11% in the nonsurgical treatment group, compared to 20% in the surgical group. Since then, because of improvements in operative and postoperative care, the mortality rate with surgical treatment of perforated peptic ulcer has decreased to about 5%.

Croft and colleagues compared surgical and nonsurgical treatment of perforated peptic ulcer in a randomized trial and concluded that an initial period of nonoperative treatment may be prudent except in patients over age 70. Careful observation is necessary during this period, but it may obviate the need for emergency surgery in 70% of patients. The mortality rate in this study was 5% in each group. Two-thirds of the patients over age 70 required emergency surgery.

Several surgical techniques have been employed in the treatment of perforated peptic ulcer. These include conservative surgery with patching of the ulcer, peritoneal lavage, and antiulcer medication, and definitive surgery with truncal vagotomy, highly selective vagotomy, or partial gastrectomy. Some studies have reported a high rate of ulcer recurrence in the conservative surgery group and have recommended definitive ulcer surgery for perforation.