Indications, feasibility and efficacy of endoscopic vacuum assisted closure (EndoVAC) therapy for upper gastrointestinal perforations

Category: Techniques of Bariatric Surgery

Geraldine Ooi1, Paul Burton1,2, Andrew Packiyanathan2, Wendy Brown1,2, Peter Nottle2
1Monash University, Melbourne, Victoria, Australia, 2The Alfred Hospital, Melbourne, Victoria, Australia

INTRODUCTION: Endoscopic vacuum assisted closure (EndoVAC) therapy is a recent innovation described for use in upper gastrointestinal perforations and leaks. It applies the principles of vacuum assisted closure (VAC) therapy to luminal defects. It potentially provides sepsis control, diversion of infected fluid, collapse of cavity and promotion of granulation, leading to improved chance of healing and decreased healing time.

CASE: This video shows the application of the EndoVAC in a 70-year old female after a perforation during placement of a band over a sleeve gastrectomy. A laparoscopy was performed for washout and placement of an external drain. Endoscopy showed a 1.5cm defect, with a 3x3cm cavity. EndoVAC therapy was initiated, and the defect closed completely after 3 weeks of therapy. This video demonstrates the method of EndoVAC therapy, using easily available and non-specialised equipment. We discuss the indications, feasibility and efficacy in various cases of upper gastrointestinal perforations.