Enhanced Surgical Recovery program

Standardizing Care to Reduce Post-Surgical Complications

Supporting the Implementation of Perioperative Goal-Directed Therapy as a Standard of Care

Edwards

You Can Make a Difference in Your

Clinical and economic benefits of hemodynamic optimization through Perioperative Goal-Directed Therapy (PGDT)

30+
randomized controlled trials demonstrate benefit

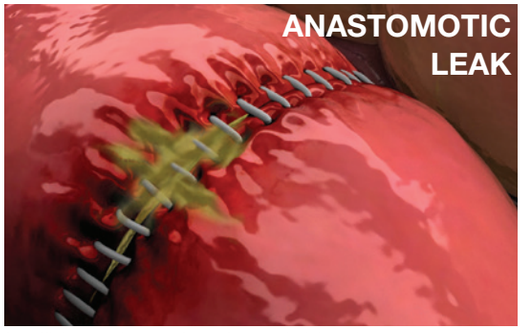
9
meta-analyses confirm benefit

When applied intraoperatively, hemodynamic optimization through PGDT has been shown to reduce post-surgical complications and reduce hospital length of stay and associated costs across a wide range of moderate to high-risk surgical populations.[1-8]

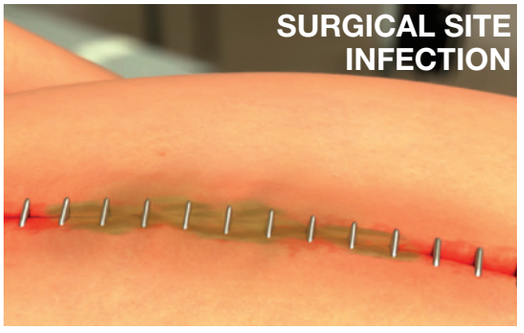
Demonstrated reduction of risk for:

- Acute kidney injury
- Urinary tract infection
- Surgical site infection
- Pneumonia
- Major/minor gastrointestinal complications

Post-surgical complications are not exceptions and average approximately 25% in high-risk patients.[9]



Insufficient and excessive volume administration may increase the risk for anastomotic leaks.



Maintaining patients in the optimal volume range may reduce the risk of surgical site infection.

Patient complications from unguided hemodynamic optimization

Both hypo-and hypervolemia may deleteriously affect organ function (see Figure 1). A PGDT protocol using advanced hemodynamic parameters can ensure the patient is maintained in the optimal volume range and reduce post-surgical complications.[10]

Complications from excessive and insufficient volume administration[10,11]

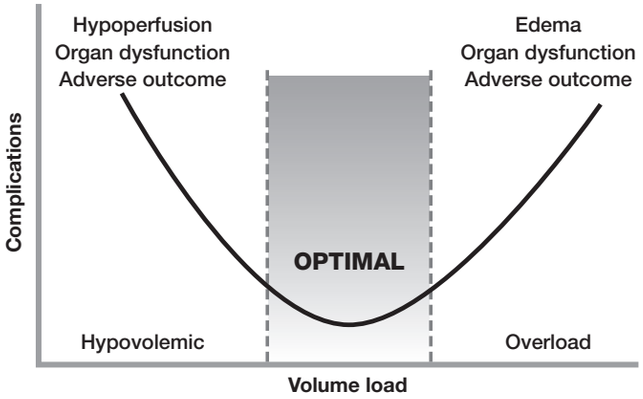


Figure 1

Perioperative Goal-Directed Therapy:
A clinician-directed treatment protocol, which defines and treats to a goal, using advanced hemodynamic parameters.[9]

While you can't prepare for every potential risk, hemodynamic optimiza a number of the most common, preventable post-surgical complica implement PGDT in your moderate to high-risk surgery procedures, achiev

Patients' Post-Surgical Recovery

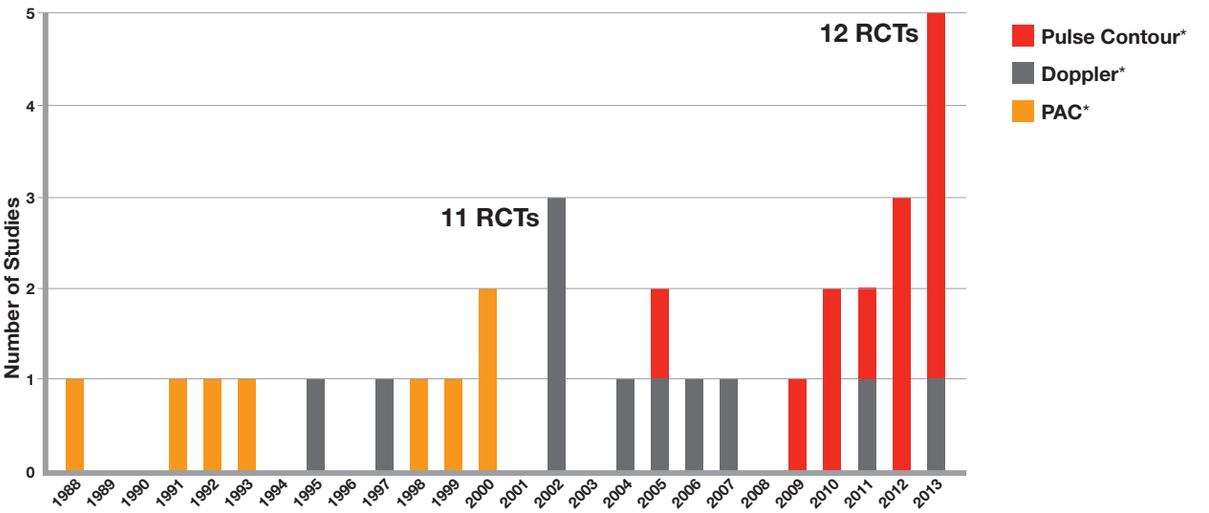
Advanced hemodynamic monitoring vs. conventional care

As seen in Figure 1 a U-shape relationship is classically described between the amount of volume administered and the morbidity rate.[10] Conventional fluid management, based on clinical assessment, vital signs and/or central venous pressure (CVP) monitoring, is suboptimal. Indeed, clinical studies have shown that CVP is not able to predict fluid responsiveness[12] and that changes in blood pressure cannot be used to track changes in stroke volume (SV) or in cardiac output induced by volume expansion.[13]

Advanced hemodynamic parameters when used in Perioperative Goal-Directed Therapy are key to optimal volume administration

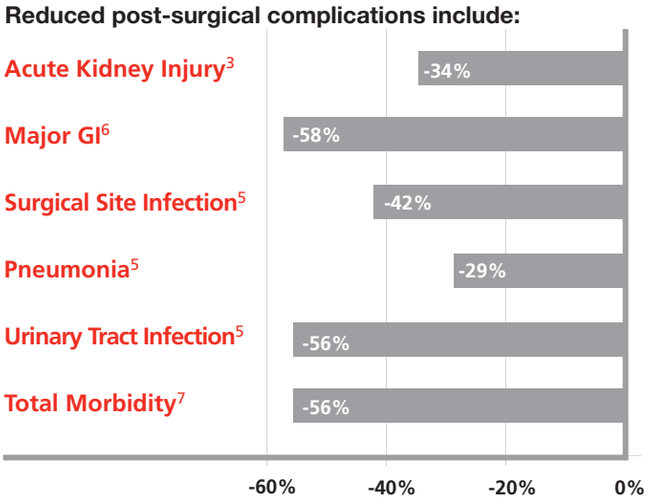
In patients at risk of developing complications, hemodynamic optimization using advanced hemodynamic parameters such as stroke volume, SV; stroke volume variation, SVV; and cardiac output, CO; are useful to decrease post-surgical morbidity.[14]

Advanced hemodynamic monitoring techniques used in randomized controlled trials demonstrating the benefit of Perioperative Goal-Directed Therapy vs. conventional care



Meta-analyses of protocols using dynamic and flow-based hemodynamic parameters have shown significant benefits

*The total population included in these meta-analyses is **5,538** patients, of which **2,801** were randomized to PGDT.*



ation through Perioperative Goal-Directed Therapy may help you avoid ations.[9] Edwards Enhanced Surgical Recovery program can help you e sustained compliance, and standardize care to enhance surgical recovery . . . . .

Edwards Enhanced Surgical Recovery Program – 4-Step Process

Standardize the care you deliver

This Enhanced Surgical Recovery program process is tailored to the specific needs of your hospital. This process – assess, align, apply, measure – helps your hospital improve patient care and reduce costs among your moderate to high-risk surgical patients. The program includes an online resource center with forms, an implementation guide and expansive educational tools.

Implement evidence-based medicine

The program provides the clinical experience and perspective to help you integrate evidence-based protocols. The program also helps you align staff across departments, deliver effective metric tracking, and facilitate peer-to-peer exchange of best practices.

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* References available upon request

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