

## The Use of ON-Q PainBuster® with Perioperative Autologous Blood Transfusion Systems

### **Background**

“Autologous” transfusion, or “autotransfusion” refers to transfusions in which the blood donor and the recipient are the same. While autologous blood transfusion is most commonly performed in the weeks prior to an elective surgical procedure, it may also be utilized during a surgical procedure in which the patient has significant blood loss. It is commonly used for cardiovascular, orthopedic, liver transplants, trauma and complex spinal surgeries. The advantages of autologous blood transfusion include the reduction of risk of transmission of viruses, avoidance of transfusion reactions, and supplementation of the sometimes-sparse supply of donor blood.<sup>1</sup>

In perioperative autologous blood transfusions, shed blood is collected from the patient and reinfused intravenously during or immediately following surgery. Autotransfusion can be accomplished either with a device that collects the whole blood and washes it to separate its components (Cell-Saver®, OrthoPAT®, or Medtronic AutoLog™ or Sequestra™ 1000), or by a device that simply collects whole blood and filters it before reinfusion (ConstaVac™, Autovac™, or Solcotrans®).<sup>2</sup>

### **Caution When Using Pain Pumps with Autotransfusion**

When using the ON-Q PainBuster in conjunction with an autotransfusion system there is a potential risk of intravascular infusion of the local anesthetic used in the ON-Q pump IF the ON-Q is initiated into the surgical incision prior to discontinuance of the scavenging of shed blood. While the risk of local anesthetic toxicity may be small due to the slow infusion rate of the pump, caution is advised. Therefore, if ON-Q Soaker catheters are inserted near or within the surgical site, clinicians should be advised to:

- Keep the ON-Q tubing(s) clamped until blood collection from the surgical site is terminated. At that time, the infusion of local anesthetic with ON-Q can be initiated.
- A bolus of local anesthetic into the surgical site should also be avoided while blood is being collected.

Please contact the Clinical Services Department at 800-444-2728 or 949-206-2700 if you have any questions regarding this information.

### **References**

1. The National Heart, Lung, and Blood Institute web site: <http://www.nhlbi.nih.gov/health/prof/blood/transfusion>
2. Fleischlag JA. Intraoperative blood salvage in vascular surgery – worth the effort? Available online at <http://ccforum.com/content/8/S2/S53>.

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