

Shorts on Standards

The CAP has 30 official liaisons to various organizations that attend scientific meetings or designate others to do so. They report to the Standards Committee, which reports to the Council on Scientific Affairs. We periodically publish bits of what the CAP's outbound liaisons hear and see in their liaison roles.

Practice parameters for perioperative blood management

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The American Society for Anesthesiology recently updated its "Practice Guidelines for Perioperative Blood Transfusion and Adjuvant Therapies" (*Anesthesiology*. 2015;122:241–275). It is a practice parameter of special interest to every pathologist who has an interest in blood management. Several other professional organizations have reported on blood conservation before, during, and after major surgery, but this report is the best guide to the various strategies available to minimize patients' exposure to allogeneic blood products in the surgical setting. The report covers cardiopulmonary bypass and cardiac surgery, emergency surgery, obstetric procedures, organ transplantation, interventional procedures in critically ill patients, management of patients with preexisting blood disorders, and options for those patients who elect not to undergo perioperative transfusion.

Prior to a scheduled surgical procedure, correction of anemia and cessation of medications that increase bleeding (anticoagulants and antiplatelet drugs) reduce the need for intraoperative blood transfusion. Predetermined strategies that restrict transfusion during surgery have been shown to reduce transfusion rates without injury. The extraordinary blood requirements surrounding massive transfusion are the exception, but the volumes required for even those patients can be minimized with prearranged component therapy. Acute normovolemic hemodilution and intra- and postoperative recovery of shed blood are likewise effective alternatives to allogeneic transfusion in specific settings. Pathologists working among multidisciplinary teams to manage the blood support of surgical patients will find this portion of the review helpful.

The authors' review of the literature regarding the monitoring of patients found limited support for frequent arterial and venous blood gas measures, red cell measures such as hemoglobin concentration or hematocrit, platelet counts, and tests for coagulation during blood-losing procedures. Stronger evidence was identified for the efficacy of thromboelastography and other viscoelastic measures to reduce blood component usage.

This report is a useful resource for the pathologist who knows that infusion of fresh frozen plasma may in many cases be avoided by discontinuing anticoagulant maintenance before a scheduled procedure, or that storage age of RBC units does not appear to be associated with deleterious outcomes in adults, or that perioperative hemoglobin/hematocrit results are useful only when blood loss is excessive or there are clinical signs of anemia. For the pathologist unfamiliar with the variety of effective interventions that require no laboratory support and that limit the need for blood transfusion, such as the use of desmopressin, antifibrinolytics, and coagulation factor concentrates, this report is a handy and informative guide.

The report includes a meta-analysis summary of each of the blood conservation modalities that is recommended. Consensus scores across American Society for Anesthesiology members show how common each of the choices is. Blood and blood components are a major cost center for many hospital laboratories, and blood conservation is an appropriate patient care strategy. Integrating laboratory and bedside procedures to meet conservation goals, as this report does, mirrors the multispecialty team management of today's patient care.

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