Perfusion Technique

An Arterial Cannula That Doesn't Kink

By Stephen Peterson, C.C.P.
Division of Thoracic and Cardiovascular Surgery
Department of Surgery
University of Iowa Hospitals and Clinics
Iowa City, Iowa 52242

A workable arterial cannula for aortic cannulation during heart-lung bypass has been developed at the University of Iowa Hospitals. Present arterial cannulae are made with a right angle, or there are straight cannulae which are made of a material which has a tendency to kink very easily. We presently use the cannula as shown, which is made of a material that will not kink when bent.

A cannula is fashioned by cutting the ends off of a Bardic venous cannula. The 24 Bardic venous (serial number 007432—formerly 1862-S) cannula when cut as shown has a comparable pressure gradient of the 22 French arterial cannula. A sleeve for the cannula is made with a short section of 1/4 inch tubing and slipped onto the cannula. The sleeve acts as a stop which can be adjusted as needed and also is used to tie the cannula securely in place. (See Figure 1)

FIGURE 1
An arterial cannula that doesn't kink.