Letters to the Editor

Percutaneous Cardiopulmonary Bypass

September 29, 1988

Dear Editor:

We read with interest the letter “A New Chapter in the History of Perfusion” by Mr. Justison. Hospitals in the Washington area have been performing the procedure he has described for over a year. However, we are confused regarding his choice of terminology.

In his second paragraph he describes the (percutaneous cardiopulmonary bypass) procedure with the opening statement “... a cutdown was performed over the right femoral artery and vein ... and then percutaneous cannulation was performed.” He further goes on to state, in paragraph four, “... weaned from CPS and a surgical repair of the femoral artery and vein were performed.” These statements are in conflict of our understanding (as well as Dorland’s Medical Dictionary) of a percutaneous procedure. It appears that the cardiologist is performing a rather complicated surgical procedure that normally is reserved for cardiothoracic surgeons in the operating theater. The subsequent surgical repair of an open cutdown with vessel repair carries an inherent risk and is normally performed in an operating theater. However, when this procedure is performed in our catheterization laboratory with the assistance of the cardiothoracic surgeon, we do not call this a “percutaneous procedure” as the appropriate terminology is open cutdown and cannulation of the femoral vessels. Perhaps, if cutdown cannulation techniques are utilized the standard term femfem bypass should be used.

We do agree with Mary Hartley-Winkler’s presentation at the last Pathophysiology meeting in which she felt that an open cutdown and cannulation procedure enhanced CPS utilization as the percutaneous approach was flawed. We enjoy the knowledge that other centers are progressive in the full utilization of the cardiovascular perfusionist and his expanding role in cardiovascular medicine.

Thank you for your time and consideration.

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This letter reflects the views and opinions of the authors only and is not official Department of Defense or Department of the Army policy or statement.

RESPONSE

Thank you for bringing to my attention several confusing points in “A New Chapter in the History of Perfusion.” As you illustrate the word “percutaneous” should not be used to describe the cutdown and direct visual arterial and venous cannulation procedure described.

An initial series of patients were cannulated using the modified cutdown procedure by a cardiovascular surgeon in a controlled environment. This enabled close evaluation of any possible vascular trauma induced by the cannula. We are now able to report that all CPS cannulations are performed using the classical modified Seldinger percutaneous technique, greatly reducing the potential risks to the patient.

Sincerely,

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