encircled by tumor. To equate the quality of data derived from this prospective clinical trial with that of clinical experience consisting of anecdotal retrospective analyses using uncontrolled historic or concomitant nonrandomized controls is inappropriate. If Drs. Henderson and Kutner are perturbed by our methodology and relegate our data to the level of clinical experience, they must be chagrined at the plethora of anecdotal retrospective uncontrolled studies that constitute the mainstay of our most esteemed surgical journals.

Finally, it is laudable on the part of Drs. Kutner and Henderson to champion the lot of the “abstract reader” or “skimmer” and to protect him from the alleged misperception to be derived from our study. This posture raises philosophical and conceptual issues as to what constitutes the appropriate form of presenting data for publication in a journal of the calibre of the *Annals of Surgery*. Should one cater to the reader who peruses an occasional manuscript with half-hearted interest and attenuated concentration or should the manuscript be written for the surgeon who is able to review the paper in a critical and objective fashion? If favoring the latter approach constitutes a disservice to clinical trials, then we admit our guilt.

**Norman Wolmark, M.D.**
**Bernard Fisher, M.D.**
*Pittsburgh, Pennsylvania*

December 20, 1986

Dear Editor:

I was dismayed to read the study “EKG Guided Placement of Subclavian CVP Catheters Using J-Wire” (Ann Surg 1986; 204:673–676). The technique described is not only unnecessary but has significant potential for iatrogenic harm.

First of all, appropriate placement of central venous catheters can usually be determined clinically by a knowledge of surface anatomy and its relation to intrathoracic structures. The entry of the superior vena cava into the right atrium corresponds closely with the sternomambrual joint (angle of Louis), which is nearly always palpable, or may be slightly caudal to the sternomambrual joint within one intercostal space. The length of catheter necessary to traverse this distance can be easily estimated by realizing the course of the subclavian vein as it passes from the infraclavicular area to the mediastinum. I have personally used this technique for many years with good results.

Secondly, central venous catheters are often placed in patients with significant underlying problems, such as electrolyte imbalance, sepsis, ischemic heart disease, or cardiomyopathy, in which case the endocardium may be irritable and predisposed to complications thereof.

The authors’ technique of manipulating central venous guidewires until arrhythmias were elicited is, to myself, both unnecessary and fraught with potential complications, especially when other reliable guides such as surface anatomy are available. The inherent arrhythmogenicity of central venous guidewires should encourage us to avoid their placement in the heart rather than purposefully seek it.

**Michael Swanson, D.O.**
*Springfield, Missouri*

Ann. Surg. • August 1987

Dear Editor:

Dr. Swanson’s concerns are valid and his initial reaction to our technique understandable. We should look closely at the advantages and disadvantages of any new technique before considering its use in our own practice.

The advantages of the guidewire technique described in our article are that the presence of atrial arrhythmia is a reliable index of catheter tip location, resulting in 100% correct placement when present. The problem with unmonitored catheter placement is not the length of catheter, which can be approximated from surface anatomy, but the possibility of abnormal location, usually in the internal jugular vein.1 Aberrant catheter location has been shown to produce incorrect CVP readings,2 and can thus frustrate the basic reason for placing the catheter in the first place.

The main disadvantage of this technique is the potential for serious arrhythmia. Our current experience in 84 patients with significant ischemic heart disease confirms that of invasive cardiologists, the actual rate of morbidity caused by arrhythmia from intracardiac catheters and guidewires is surprisingly low.3 This unexpected result perhaps renders this procedure more benign than it may appear at first sight.

In common with most procedures, the success rate in CVP catheter placement is of course operator dependent, and we would suggest consideration of this technique only for those physicians dissatisfied with their current results. Thus, not all physicians will have use for this technique, and those who do should bear in mind the importance of EKG monitoring and withdrawal of the guidewire if ventricular arrhythmia should occur.

**David S. Starr, M.D.**
*Youngstown, Ohio*

January 20, 1987

References

of the operation very rapid. My cases are followed carefully
and 4-year patency rates using the life table method are equiva-
 lent to those of Leather. In my hands at least, bypasses to the
ankle using the reverse technique have not been feasible.

Be that as it may, and accepting Dr. Porter’s thesis and his
data, I must still quarrel with his conclusion in the final para-
graph of his paper: “surgeons who achieve comparable results
in their own practices should feel no pressure to switch to ISVB
because of presumed superiority of the latter technique.” Were
the in-situ technique truly more complicated than the reverse
technique, and if the results are truly equal, then Dr. Porter’s
point would be well taken. However, in point of fact, anyone
who has been brought up on the in-situ technique finds it far
simpler to do than the reverse technique. I suspect, then, that
new surgeons, exposed to the in-situ technique, will also “feel
no pressure” to switch to reverse vein grafting because of the
presumed equivalency of the latter procedure.

In short, if the results are equal, why not choose the easier,
in-situ technique?

GEORGE D. LE MAITRE, M.D.
Andover, Massachusetts

April 15, 1987

Dear Editor:

We are honored to reply to the points raised by Dr. Le-
Maitre regarding reversed versus in situ vein grafts. The author
makes several statements in his letter including: (1) we, and
others who perform reversed vein grafts, “represent a minority
view,” (2) the author has been unable to achieve satisfactory
results with reversed vein bypass to the ankle, and (3) Dr.
LeMaitre believes that anyone who has performed both tech-
niques will find the in situ bypass easier to perform.

We are pleased that the author appears to accept our data
that demonstrate at least equivalent patency figures for in situ
and reversed bypass. We are not prepared to comment on the
percentage of vascular surgeons in the United States using
reversed or in situ grafts, as we have no specific data in this
area. Likewise, we have no comment regarding the author’s
inability to achieve reversed vein grafts to the ankle level. This
technique is routinely satisfactory for us and others who use
the reversed vein technique.

With regard to the relative ease of performing either opera-
tion, we have several comments. It is our belief that any vein
that can be used for in situ bypass can also be used with re-
versed technique. The converse of this statement, however, is
not true. In situ bypass requires an intact greater saphenous
vein. This means that the in situ operation must be confined to
patients whose legs were not operated on previously. It is easy
to understand the perception that the technique is easier if one
confines operations exclusively to this “best case” patient
group. In the patient group described in our paper, 33% of
patients did not possess an intact ipsilateral greater saphenous
vein, and would not have been eligible for in situ bypass. All
these patients had successful revascularization using reverse
technique. Adherence to the in situ technique automatically
eliminates this important patient group, which in our experi-
ence is increasing in size, partly due to increasing numbers of
patients referred after failed in situ bypass. Limiting lower
extremity bypass to the in situ technique thus may be viewed
from one aspect as a means to guarantee improved operative
results by eliminating from consideration the group of patients
(those previously operated on) in whom it will be most difficult
to achieve successful lower extremity revascularization.

These considerations aside, however, it remains clear from
abundant published evidence that equally skilled surgeons
may be expected to obtain equivalent results with reversed or
in situ vein grafts. Currently we are unaware of any evidence
indicating clear superiority of one technique over the other.
However, the reversed vein graft technique is applicable to
significantly more patients, including the difficult patient
group with failed previous bypasses. We are honored that Dr.
LeMaitre found our article sufficiently provocative to warrant
comment.

LLOYD M. TAYLOR, JR., M.D.
JAMES M. EDWARDS, M.D.
EDWARD S. PHINNEY, M.D.
JOHN M. PORTER, M.D.
Portland, Oregon