Bring Back the Ward Laboratories

To the Editor:

In the editorial by Dr. A. Jay Block,1 which appeared in the November 1993 issue of Chest, the author laments the disappearance of the ward laboratory and expresses some bewilderment over why this has occurred. In the inner-city hospital facing financial cuts in which I work, the motivation for its removal may have been financial, as tests performed in a ward laboratory are unreimbursed while those performed in the central laboratory are billable.

I would not join with Dr. Block in pressing for the return of such work areas, as they are used by various people who are both pressed for time and do not view housekeeping as being among their responsibilities and, hence, rapidly become littered with broken micropipettes and glass slides of unknown contagion. The staff with which I now work routinely assumes a certain risk of exposure to HIV, tuberculosis, and hepatitis as part of caring for our patient population. I believe that there is no shame in refusing to assume unnecessary risks. If ward laboratories were returned, I would not use them unless dedicated staff were provided to monitor routine waste disposal. However, this is unlikely as routine services are being cut as part of cost-containment measures.

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REFERENCE

1. Block AJ. Bring back the ward laboratories [editorial] Chest 1993; 104:1317

Nonphysician Placement of Arterial Catheters

To the Editor:

The article entitled "Nonphysician Placement of Arterial Catheters,"1 by Drs. Gronbeck and Miller, which appeared in the December 1993 issue of Chest, as well as the editorial comment by Dr. Tenholder2 in the same issue are interesting. We have had a great deal of reservation regarding the indications for arterial lines and indwelling lines in our practice. We have always felt that the quicker we could remove lines and intravascular injection or withdrawal of materials it would be to the benefit of the patient. The indications for arterial lines in some instances seem to be very liberal; for example, does every thoracotomy or every ICU patient require an arterial line or every open heart patient or every COPD patient having surgery?

Complications and risk of these intravascular lines including infections and loss of extremities have been well documented in the world literature. The article by Gronbeck, raises the question as to the reason for respiratory therapy insertion of these lines. Was this to have a more economical procedure which might be used to a greater extent or was this to free the burdens of the physician? How many additional arterial lines were placed in patients in their institution in this same period and were they all indicated, or as Dr. Tenholder implies, there should be more rigid or firm guidelines for the indications for arterial lines. It is appropriate and timely that the indications for arterial lines be reviewed and questioned. Furthermore, it is a shame that possibly the indications for review of this comes up under cost effectiveness in the current climate of healthcare cost as compared with having come up under quality of care and whether they are necessary to start with. Your article and editorial comments are welcomed and certainly fruit for thought. I appreciate the opportunity to comment.

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REFERENCES

2. Tenholder MF. The pendulum and the arterial line [editorial]. Chest 104; 1650-51

To the Editor:

Dr. Dieter raises two issues in his letter: the safety of arterial catheterization and the indications for the procedure as a quality of care issue.

The safety of arterial catheterization is well documented in our data and that cited in the literature. The main risk is the low incidence of local infection. Although the loss of extremities may have occurred, I have not encountered this nor seen it in the literature I reviewed.

Our paper did not intend to define the indications for arterial catheterization. We rely on case by case physician evaluation to judge the need for an arterial line. In general, we try to target arterial lines to those patients with sepsis or with respiratory failure in whom arterial blood gasses would dictate changes in therapy. Access for blood drawings is a secondary gain and never a primary indication for an arterial line.

The separation of economic vs quality of care criteria, to assess a procedure, is to me artificial. Best practice dictates control of both quality of care and cost. In our experience, the respiratory therapists had fewer complications, vs the physicians, as they worked from a controlled protocol and costs were less.

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Errata

In the selected report, "Sinus Arrest Associated With Dipyridamole Infusion," by Lo Mauro et al (Chest 1994; 105:604-05), the sentence that begins at the bottom of column 2, page 604 and continues on page 605 should read, "The arrhythmia described eventually appeared about 15 min after vein cannulation and 3 min after the end of dipyridamole infusion. Accordingly, we think it possible that sinus arrest in our patient was related to dipyridamole infusion."

The equation found on page 1,205 in the article by Jouineaux et al, "Synchronized Intermittent Mandatory With and Without Pressure Support Ventilation in Weaning Patients With COPD From Mechanical Ventilation," (Chest 1994; 104:1204-10) should have a division line:

\[ V_{O_2} = V_E (STPD) \times \left[ \frac{F_{\text{O}_2} (1-F_{\text{CO}_2} - F_{\text{E}O_2}) - F_{\text{E}O_2}}{1 - F_{\text{E}O_2} - F_{\text{CO}_2}} \right] \]