intake? (2) In patients who tend to be azotemic, is it not foolish to give such large amounts of branched-chain amino acids? (3) What was the origin of the sepsis?

Taking the questions in reverse order, the source of sepsis in almost all patients was intra-abdominal and generally had mixed flora, including *Escherichia coli*, bacteroides, and some nosocomial organisms, such as *Serratia*, etc.

The points concerning the large intake of nitrogen are well taken. Our practice in giving 1.5 g/kg as protein equivalent does add up to a lot of nitrogen for a patient, but this is the current evolution of thinking and practice of nutritional support teams in the United States. According to some data, nitrogen is the preferred fuel. According to others, it may be that increased amounts of nitrogen are responsible for improved hepatic protein synthesis.

Certainly, in this patient group there was no azotemia. In fact, 4–8 g of nitrogen given as branched-chain amino acids is generally inappropriate because it is insufficient to support hepatic protein synthesis in patients with this degree of sepsis. As Dr. Piccolboni points out, none of these patients was azotemic, and, in fact, their rise in BUN was not substantial.

Undoubtedly, many of the points that Dr. Piccolboni raised will continue to be controversial as the etiology and some of the metabolic changes in sepsis become more apparent.

JOSEF E. FISCHER, M.D.
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March 14, 1986

Dear Editor:

Tru-cut* needle biopsy for diagnosing breast cancer* comes as a surprise. Fine needle aspiration cytology (FNAC) is an accepted and established technique of diagnosing breast cancer. In a comparison of diagnostic results obtained by FNAC and Tru-cut or open biopsies, Innes and Feldman2 encountered seven cases in which FNAC provided a diagnosis of neoplasm when Tru-cut biopsy (4) and open biopsy (3) did not (2 of these were breast cancers). The simultaneous in-and-out and radiating motion of the needle in FNAC provides a fan-like sampling pattern, and cellular material is collected from throughout the mass. With Tru-cut needle, sampling of the same volume would require multiple biopsies. Tru-cut and open biopsies fail if extensive necrosis is present. FNAC increases the chances of obtaining tissue from viable areas. Dixon and associates3 have reported 99% sensitivity and 95% specificity in 328 patients. Wollenberg and associates4 obtained a 65% sensitivity and 100% specificity in 231 FNACs. The predictive values of positive and negative diagnoses were 100% and 89.6%, respectively, and the overall diagnostic accuracy was 91.3%. Three fourths of the false-negative results were due to sampling errors. There was no false-positive result.

FNAC is easy and less costly. Multiple aspirations can be performed without difficulty. Only slight pain is encountered during the procedure; it rarely continues after the needle is removed. FNAC causes minor bruising only—no hematomas, no infection. Tru-cut biopsy, on the other hand, causes marked bruising and hematomas. Most of the false-negatives are due to sampling error, and false-positives occur only during the learning phase. Experienced and interested cytopathologists and cyto technologists can eliminate false-positives altogether, thereby strengthening clinicians' trust in a positive cytologic diagnosis. False-positives are, however, seen even with Tru-cut biopsy5 and frozen section biopsy.6 FNAC should, therefore, be the initial diagnostic procedure for a breast lump.

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References


April 10, 1986

Dear Editor:

We recognize the value of the thin needle aspiration for diagnosis of breast carcinoma. However, we feel more comfortable with a tissue diagnosis before subjecting the patient to radical mastectomy. The Tru-cut* needle biopsy with frozen section provides a rapid, reliable, simple, and economic method of tissue diagnosis.

ENRIQUE GONZALEZ, M.D.
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Dear Editor:

On the basis of their indirect immunofluorescence (IFL) studies Cerilli and coworkers state that complement-fixing autoantibodies directed against vascular endothelial cell antigens and antibodies to autologous monocytes are the underlying cause of endothelial cell damage in the development of atherosclerosis.

In recent years, several authors have described similar results concerning Crohn's disease, chronic intestinal obstruction, and burns.1,2 In these cases, specificity was proven. Cerilli and associates are convinced of the specificity of the antibodies causing atherosclerosis as well.

These findings would be of great importance, but, unfortunately, the results may be seriously doubted because of methodologic faults. After isolation of cells, the trays were fixed with