P. possible acute nontransmural infarction

Possible Acute Nontransmural Infarction

To the Editor:

In their report entitled “Positive Radionuclide Myocardial Infarction Pattern After Ventricular Fibrillation and Direct Current Countershock” (Chest 71:673-674, 1977), Sonnenblick et al indicated that electrical evidence of infarction was not present, since serial electrocardiograms showed no alterations from previous tracings; however, careful inspection of their Figures 1 and 2, somewhat hampered by the poor quality of Figure 2, shows changes of global repolarization most apparent in leads 1, V4, and V6. Since the legend for Figure 2 of Sonnenblick et al stated that these changes persisted for at least one week and since the text described slight elevations in serum levels of enzymes, it is possible that the patient had an acute nontransmural infarction that triggered his ventricular fibrillation. While the electrical criteria for nontransmural infarction may be argued, I believe that it is unfair to interpret Figures 1 and 2 of Sonnenblick et al as showing no real change.

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Epidemiologic Significance of Primary Resistance in Spain

Refutation of the Concept of Transmission of Resistant Strains of Mycobacterium tuberculosis

To the Editor:

It is generally accepted, following the survey carried out by the International Union against Tuberculosis in 1960,3 that primary resistance is a consequence of contagion with resistant strains of tubercle bacilli transmitted by patients excreting drug-resistant organisms. An increase in the incidence of primary resistance suggests that resistant strains are transmitted by patients receiving inadequate treatment; however, in no country has it been possible to demonstrate the feared increase of primary resistance. In countries with well-developed health services, the stable incidence of primary resistance is justified by correct chemotherapy and prophylaxis, and in developing countries the stable incidence is attributed to the reduced use of drugs among the population.

Since 1952, the Spanish community has presented a high epidemiologic risk for the transmission of drug-resistant organisms. Acquired resistance affects many patients, due to the incorrect chemotherapy for tuberculosis which is received by nearly all. From 1966 to 1975, we have investigated the primary resistance found among 685 previously untreated tuberculous patients. The observed incidence was only 13 percent (88 patients) for standard drugs (streptomycin, isoniazid, and p-aminosalicylic acid [PAS]), similar to the findings in another published report.2,4 No increase in primary resistance for standard drugs has been observed in Spain during the ten years of observation. The cohorts of young people under the ages of 20 to 30 years do not evidence a greater incidence of primary resistance than the cohorts infected before the period of chemotherapy who were not exposed to the risk of infection by resistant organisms.

There is no correlation between the prevalence of primary and acquired resistance either. The incidence of primary resistance to streptomycin (7 percent [46]) is higher than the incidence of primary resistance to isoniazid (5 percent [37]), a surprising fact when one considers that the incidence of acquired resistance (among 434 treated patients) to isoniazid (33 percent [143]) is much higher than the incidence of acquired resistance to streptomycin (18 percent [79]). Multiple resistance to standard drugs is rare in primary resistance (2 percent [12]) and relatively frequent in acquired resistance (13 percent [57]).

From these paradoxical facts, we conclude that primary resistance does not really express contagion transmitted by patients with acquired resistance. This fact might be explained by a decrease in or nonexistence of the infecting capacity of the organisms with acquired resistance. The smaller capacity for transmission and pathogenic power have been exposed experimentally,4 epidemiologically,5 and clinically.6,7

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Rapid Placement of Flow-Directed Catheters

To the Editor:

Various techniques have been employed in the placement of balloon-tipped flow-directed catheters. The approach through a cutdown in the antecubital fossa is relatively free of hazard, but venospasm may occur, prolonging the procedure or making the advancement of the catheter impossible. Introducers, when used, do not have this disadvantage but when placed in a vein with a large bore do have the following two disadvantages: (1) the needle tract may ooze blood for up to a week; and (2) as one advances the introducer over the directing needle, the vein may be pushed off of the end of the needle. We describe a simple technique that has none of these disadvantages.

TECHNIQUE

The supraclavicular area is cleansed with a povidone-iodine solution (Betadine), and the surrounding area is draped to maintain sterile conditions. The patient is placed in Trendelenburg's position, and a 14 gauge needle on a 10-ml syringe is advanced into the subclavian vein. When blood returns, the syringe is removed, and a 150-cm Teflon-coated guide wire with a flexible tip (Cook Inc., type TSF; 0.025 inches in diameter) is advanced, with the flexible tip first, into the vein for a distance of 15 to 20 cm (Fig 1). The needle is then withdrawn over the wire while the wire is left in place. The external portion is wiped with a sterile gauze pad soaked in heparinized saline solution. The catheter (No. 7 French) is flushed with heparinized saline solution and advanced over the wire. Once the catheter is at the level of the skin, the wire is slowly withdrawn until it protrudes from the proximal end of the catheter, with the distal end remaining in the vein. The proximal end of the wire is held securely, and the catheter is advanced to the 15-cm level. The wire is removed, and the catheter is flushed, aspirated, and then advanced in the usual manner.

Exercise Testing in Right Bundle-Branch Block

To the Editor:

In regard to our article entitled "The Electrocardiographic Response to Maximal Treadmill Exercise Testing of Asymptomatic Men with Right Bundle Branch Block,"1 we would like to report additional information and observations. In our report, we observed that there was no depression of the S-T segment noted in two left ventricular leads (leads V6 and CC6) or in an infero-superior bipolar lead. Although changes were noted in the Z lead (which is similar to lead V2) and were displayed in Figures 1 and 2 of our article,1 we made no mention of these changes.

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