Correction

Evaluation of a Rapid Readout Biological Indicator for 121°C Gravity and 132°C Vacuum-Assisted Steam Sterilization Cycles

During production, an error was introduced into Table 1 of the article "Evaluation of a Rapid Readout Biological Indicator for 121°C Gravity and 132°C Vacuum-Assisted Steam Sterilization Cycles" (1995;16:281-286). The last line read incorrectly as printed. The corrected table follows. We regret any inconvenience to the author and readers.

TABLE 1
COMPARISON OF SIX BIOLOGICAL INDICATORS IN 121°C GRAVITY DISPLACEMENT STEAM STERILIZATION CYCLES

		Number of Positive Indicators/Total in Cycle			
		Cycle lime			
Biological Indicator	Incubation	5 minutes	10 minutes	12 minutes	15 minutes
Attest 1292 Rapid Readout					
Fluorescence	30 min	60/60 (100%)	12/60 (20%)	0/60 (0%)	0/60(0%)
	1 hr	60/60 (100%)	26/60 (43%)	1/60(2%)	0/60(0%)
	2 hrs	60/60 (100%)	43/60 (72%)	12/60(20%)	0/60(0%)
	3 hrs	60/60 (100%)	50/60 (83%)	20/60(33%)	0/60(0%)
Color Change	24 hrs	44/60 (63%)	13/60 (22%)	2/60(3%)	0/60(0%)
	48 hrs	60/60 (100%)	24/60 (40%)	2/60(3%)	0/60(0%)
Attest 1262*	24 hrs	60/60 (100%)	5/60 (8%)	0/60(0%)	0/60 (0%)
	48 hrs	60/60 (100%)	12/60 (20%)	0/60(0%)	0/60(0%)
Proof Plus*	24 hrs	42/60 (70%)	2/60 (3%)		0/60 (0%)
	48 hrs	59/60 (98%)	5/60 (8%)		0/60(0%)
Assert*	24 hrs	41/60 (68%)	1/60(2%)		0/60(0%)
	48 hrs	43/60 (72%)	1/60(2%)		0/60 (0%)
ATI Test*	24 hrs	49/60 (82%)	0/60(0%)		0/60(0%)
	48 hrs	49/60 (82%)	0/60 (0%)		0/60(0%)
Biosign*	24 hrs	52/60 (87%)	19/60 (32%)		0/60(0%)
	48 hrs	60/60 (100%)	22/60 (37%)		0/60(0%)

* Observation of color change due to change in pH of the medium

Blood Culture Results Found to Have Limited Effect on Antibiotic Choice by House Staff

by Gina Pugliese, RN, MS
Medical News Editor

Researchers at the New England Medical Center in Boston recently assessed the frequency of antibiotic modification and the rates of proper documentation of blood culture results by house staff physicians of 199 patients with 226 episodes of bacteremia.

In this institution, the changes prompted by the blood culture results consisted primarily of the addition of antibiotics to cover the blood isolate, significantly increasing appropriate therapy from 67% at the time of culture to 91% after the availability of culture results. However, therapy was narrowed to a single agent in only 16% of the true unimicrobial bacteremia episodes, indicating over-utilization.

The researchers evaluated the number of antibiotics used to treat true episodes of bacteremia. Excluding patients in whom broad-spectrum coverage was justifiable, 54 episodes of true unimicrobial bacteremia received two or more antimicrobials. Following the sensitivity report, the pattern of broad-spectrum coverage persisted: 20 episodes were treated with two drugs, 18 with three drugs, and four with four drugs, and the treatment of only 12 episodes was switched to single-agent therapy. The most commonly used agents were broad-spectrum antibiotics, including vancomycin, third-generation cephalosporins, and imipenem.

Documentation of positive blood culture results in the chart by house staff physicians was absent in 26% of the patients. Documentation was more likely if the isolate was a gram-negative rod, if the patient was receiving antimicrobial agents, and if a change in the antibiotic regime was made. Surgeons were found to be approximately three times less likely to document culture results, compared with all other services.

The researchers noted that antibiotic therapy may be improved with newer techniques for more rapid identification and susceptibility, the availability of a trained infectious disease consultant to discuss individual cases, and adequate documentation in the medical record as a manifestation of clinical thought in treating a patient with bacteremia.

FROM: Arbo MDJ and Snydman DR. Influence of blood culture results on antibiotic choice in the treatment of bacteremia. *Arch Intern Med* 1994;154:2641-2645.