Full agreement was 85.5%, essential agreement 91.5%. Over half of the minor and major D concerned the pair *E. coli* – cephalothin.
Cobas-Bact® direct antimicrobial susceptibility test of positive urine samples seems to give accurate results within 5 h of detection by gram stain of monomicrobial bacteriuria.

Passive hemagglutination test for detection of antibodies to streptolysin O

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A passive hemagglutination test (PHT) for assaying antibodies to streptolysin O (SLO) is described. The test uses glutaraldehyde treated and SLO-sensitized sheep erythrocytes as reagent. In contrast to the antistreptolysin O (ASO) test, the PHT utilizes the membrane form of SLO as antigen. Recently it was shown that SLO, after binding to a cholesterol-containing membrane, self-associates to form curved, rod-shaped oligomers of up to 80 SLO monomers that are amphiphilic and that penetrate into the apolar domains of the membrane. During naturally occurring infections with SLO producing streptococci the membrane form of the toxin may represent the primary antigenic form of the toxin. To test the utility of the PHT, antibodies to SLO were determined in 636 human sera and the results compared with the titres of the ASO test. All sera with elevated titres in the ASO test agglutinated the sensitized erythrocytes in dilutions higher than 1:800. In addition however, the PHT recognized anti-SLO antibodies in high concentrations in some sera with normal ASO titres. These sera were mostly derived from patients suffering from streptococcal skin infections which are known to induce low levels of neutralizing anti-SLO antibodies. The PHT appears superior to the ASO test for detecting anti-SLO antibodies and is also far simple to perform.

Rapid susceptibility testing of *Nocardia asteroides* with an automated instrument

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MIC determination for *Nocardia asteroides* (NA) by agar dilution takes 48 h and MIC performed with broth dilution is unreliable because of inhomogenous growth. We evaluated the Cobas-Bact instrument (CBR) capable of measuring automatically the optical density of a growing broth culture during centrifugation; comparatively with the standard agar dilution method (SAD), the MICs obtained by the CBR with 9 antibiotics on 6 clinical isolates of Na were equal in 16.6%, within a two-fold dilution in 52.6%, four-fold dilution in 20.3% and eight-fold in 10.5%. MICs in CBR were higher than MICs in SAD in 48%, and concerned mainly cephalosporins, quinolones and amikacin. In contrast, MICs and CBR were lower than in SAD in 35.3% and concerned mainly tetracyclines and netilmicine. With CBR, 11% of results were obtained in 6 h, and 100% within 12 h.
In conclusion, CBR can be used for the rapid susceptibility testing of Na and looks promising for the MIC determination of organisms with inhomogenous growth in broth cultures.

Use of rapid bacteriuria screening tests in urines transported with Urine C&S Transport Kits

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Fresh urine (U) obtained by catheterization or mid-stream from 124 hospitalized adult patients were analyzed immediately and after 24 h of conservation at 20 °C in Urine C&S Transport Kit (UT, Becton Dickinson). Screening for bacteriuria and pyuria was performed with Bac-T-Screen (BTS, Marion Laboratories), BM-Nephur-Test and Leuco (LN, Boehringer), hemocytometer cell counts (WBC) and quantitative cultures of uncentrifuged U and UT. 62 U (50%), (56 UT = 45%) were culture positive with two or less pathogenic organisms, 33.9% (UT 35.7%) with predominant gram-negative rods (GNR), 14.5% (UT 14.3%) with gram-positive bacteria (GP) and 51.6% (UT 50.0%) with mixed GP-GNR. Agreement between BTS-U versus BTS-UT was obtained in 96.7%, between LN-U versus LN-UT in 95.2% for Leucocyte esterase and 79.8% for Nitrate respectively and WBC-U versus WBC-UT in 74.1% of Leucocyte counts over 8/mm^3 (±25%). 18 BTS-U (16 BTS-UT) could not be evaluated due to filter clogging.
Rapid screening methods such as Bac-T-Screen, leucocyte esterase and WBC can be used after one day conservation in Urine C&S Transport Kit.

Description and interest of the new API kit (API 20 EC) for identification of coliform enterobacteria

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An identification system for β galactosidase positive enterobacteria, which group known species of coliform group ('fecal coliforms') and saprophytic species from environment ('non fecal coliforms') was developed in collaboration with API research laboratory (France).
It consists of 20 biochemical characters and identify 31 species. Interest of this kit is discussed in two fields: – water analysis control, with the differenciation of fecal and non fecal species – medical analysis, with the recent isolation of some of saprophytic species such as *Rahnella aquatilis* and *Klebsiella trevisanii.*

Gas chromatographic analysis of bacterial cells: a rapid and accurate identification of pathogenic Campylobacters

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Cells harvested from five Petri dishes with Müller Hinton Blood Agar were treated according to the method outlined by Moss et al., Appl. Microb. *28* (1974) 80. The final extract does or does not contain lactobacillic acid (C19:OΔ) depending on whether the bacteria were *Campylobacter jejuni* or *coli* on the hand or *Campylobacter fetus* ssp. *fetus* (*Campylobacter intestinalis*) on the other.
The method tested and verified by using 11 reference strains has been applied to 55 strains of *C. jejuni* and to 14 strains of *C. fetus* ssp. *fetus*. The clear results of the gas chromatography (100% of the strains of *C. jejuni* contained C19:OΔ, whereas none of the strains of *C. fetus* ssp. *fetus* contained it) has permitted us to simplify the bacteriological tests. We now establish the following characteristics: mobility, gram stain, oxidase, TTC, susceptibility to nalidixic acid, and gas chromatographic analysis used as a confirmation.

Identification of gram-negative rods with the Quantum II Microbiology System: probabilities and reproducibility

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The Quantum II Microbiology System (Abbott Laboratories Diagnostic Division, North Chicago, Ill.) provides for the mechanized identification of Enterobacteriaceae (E) spp., a few spp. of nonfermenters, and *Aeromonas/Plesiomonas*. Reactions