

Acid Phosphatase Activity in *Klebsiella* species

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Acid phosphatase activity was determined in cultures of *Klebsiella* grown in semisynthetic media containing glucose and succinate as source of carbon. The phosphatase substrate was 7.6 mM *para*-nitrophenyl-phosphate in a pH 4.9, 0.09 M citrate buffer solution. Bacterial cultures were diluted out in buffer and adjusted with means of an EEL nephelometer to 58% of the deviation of the galvanometer (100% was the ground glass standard). After minutes contact of aliquots of suspension and reagent followed by centrifugation, the supernatant was read in a Spectronic 20 at 405 nm. The distribution of the values obtained within each of the 3 main species of *Klebsiella* in this study exhibited a single peak. The medians were as follow: *K. species* 0.3–0.4; *K. aerogenes* 0.2–0.3; *K. oxytoca* 0–0.2. The strains had been isolated from clinical cases in the university hospital. Criteria defining the severity of cases were established. There was an agreement between phosphatase activity and severity of cases as if the strains possessing high phosphatase activity were more virulent than the others.

Staphylococcus epidermidis with Positive Coagulase

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BAIRD-PARKER has defined in 1963 the coagulase as the main character of *Staphylococcus aureus*; the lack of coagulase being characteristic of *Staphylococcus epidermidis*. In 1967–68 BROWN and JEFFRIES have isolated a strain that presented the biochemical characters of *Staphylococcus epidermidis* although it was producing a coagulase. An identical phenomenon has been discovered in this laboratory upon the isolation of *Staphylococcus* from Swiss milks and various types of cheese, such as Vacherin 'Mont-d'Or'. 16 investigated strains have shown the following results according to Bergey's manual, 8th edn. 1 strain — *St. aureus*; 1 strain — *St. epidermidis* biotype 2; 1 strain — *St. aureus* with serotype 52.260; 13 strains — *St. epidermidis*, biotype 1 with positive coagulase. It is surprising that 81% of our strains do present this anomaly.

Comparison of the Reversed Passive Hemagglutination with the Electroimmunodiffusion Method for Hepatitis B Antigen

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In order to find the most rapid, effective and accurate HB Ag detection method, we employed comparatively the electroimmunodiffusion technic (EID) and the reversed passive hemagglutination one, to reveal HB Ag in 483 sera of 100 clinical patients admitted for renal epuration. 14% are found to have HB Ag with EID against 16% with hemagglutination, a method which gives us higher rates as EID and allows us to follow up the patients with more precision. Moreover, this technic requires control-tests in order to detect non specific positives (8%) and the results are given after 2 days against 1 day with EID. Finally, hemagglutination is three times more expensive as EID. The EID method is then preferable for a systematic detection.

Comparison of the Sensitivity of Electroimmunodiffusion, Reversed Passive Hemagglutination, Latex Test and Radioimmunoassay for Hepatitis B Antigen

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In order to compare the sensitivity of 4 technics, electroimmunodiffusion (EID), reversed passive hemagglutination (RPH), latex test and radioimmunoassay (RIA) for the detection of Hepatitis B Antigen, we tested 191 sera of clinical patients (endoscopy service). Included in this study was the detection of antibodies anti HB Ag with RIA and EID. 43 sera (22%) were found to be positive; 29 (15%) with antibodies and 17 (8,9%) with HB Ag. 3 sera contained both antibodies and Ag. The RIA test gave us 40 positive sera (29 with antibodies, 15 with Ag). EID: 15 positive sera (11 with antibodies, 5 with Ag). RPH and latex test, each 9 positive sera (9 HB Ag). Therefore, the RIA test is preferable in view of its sensitivity to detect HB Ag; EID shows the least sensitivity. For the detection of antibodies anti HB Ag, our results indicated that RIA also is the best method when compared to EID.

New Instruments for the Laboratory Diagnosis of Hog Cholera Using the Fluorescent Antibody Technique

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The hog cholera virus (HCV) multiplies in tissue culture usually without cytopathic effect. Due to this fact only indirect methods are applicable in demonstrating the virus. Immunofluorescent techniques showed to be most convenient to mark the virus in diagnostic methods such as isolation and neutralization tests. As the fluorescent antibody technique is very laborious we have looked for instruments to facilitate the technique. Two kind of chambers, the 'Liess Kammer' and the 'Lab-Tek-Chamber', have been found to be suitable. These tools make it possible to culture the cells, to incubate the virus, to fix, to stain and to wash the specimen slides without need to transfer them. The danger of damage or breakage is greatly reduced; at the same time the handling of the specimens has speeded up and is less difficult. These chambers are applicable time saving not only with non-CPE causing viruses, e.g. viruses isolated from diagnostic material can already be characterized by immunofluorescence in the first passage.

Molecular Structure of the R-Factor P111-ACS: Aggregate and Cointegrate

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The transferable R-factor P111-ACS (Ampicillin, Chloramphenicol, Streptomycin) and one of its infectious segregants P111-A have been physically characterized. *E. coli* strains harboring these plasmids produce a type I β -lactamase, as defined by PITTON (Rev. Phys. 65, 15–93, 1972). Preliminary genetic observations suggest that P111-ACS is composed of independent replicons allowing the segregation of R-determinants during con-