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A NEW *ESCHERICHIA COLI* SEROTYPE CAUSING EXPERIMENTAL KERATO-CONJUNCTIVITIS IN THE GUINEA-PIG (CULTURE 412-DEC-66) (PRELIMINARY REPORT)

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SUMMARY

Some biochemical and serological characteristics of a *E. coli* strain capable of causing experimental kerato-conjunctivitis in the guinea-pig were presented. The culture (412-DEC-66) was isolated from the feces of two years and six months old girl suffering from acute diarrhea.

This is a preliminary report on a *E. coli* serotype which is capable of causing experimental kerato-conjunctivitis in the guinea-pig identical to that caused by virulent *Shigella* strains. The culture was isolated from the feces of a two years and 6 months old girl (S.D.C.) suffering from acute enteritis and presenting about ten avacuations a day. The biochemical reactions given by it were as follow: indol was formed and the Methyl-Red reaction was positive. The VOGES-PROSKAUER reaction was negative. SIMMONS' Citrate was not utilized, gelatin was not liquefied, hydrogen sulfide was not produced in triple sugar iron agar, urea was not hydrolized, lysine was not decarboxylated and growth did not occur in KCN medium. Sodium acetate was utilized and acid was produced from lactose, mannitol, maltose, xylose, rhamnose and arabinose, within 24 hours of incubation. Sucrose was fermented after three days and acid was not produced from salicin, dulcitol, adonitol, inositol, and sorbitol during two weeks of incubation. Acid and gas were produced from glucose and the culture was non-motile. In preliminary agglutination tests employing 0 anti-sera for *E. coli* 01 to *E. coli* 0145 the culture was strongly agglutinated by the serum for *E. coli* 0144. When tested in serial dilutions of this serum the 0 antigen suspension of the culture was agglutinated at 1:1280 (homologous titers 1:1280). Inoculation of several colonies of the culture into the guinea-pig eye was followed by typical "kerato-conjunctivitis shigellosa" in all the cases. As far as we know none *E. coli* strain with the above characteristics has been described so far.

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