

Contribution to the normal fecal flora of the hamster.

Proteus mirabilis in normal feces of hamster

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It is important to know the bacterial components of the normal intestinal flora of laboratory animals. In early investigations one of us (PACHECO) found in the vaginal exsudate of a female hamster, in oestrus, microorganisms with characteristics of *Proteus sp.* So we decided to examine the prevalence of *Proteus* in feces of normal hamsters.

METHOD

Samples of fecal material of hamsters (*Cricetus auratus*) were suspended in saline and spread on plates of Teague and Kristensen media. All cultures produced colonies of small, Gram negative, motile rods, spreading on agar surface. Growth in Koser media, liquefaction of gelatine, absence of indol production, decomposition of urea in Christensen media and production of hydrogen sulfide in bismuth agar, were the principal characteristics. Acid and gas in dextrose, slow acid in sucrose, no acid in lactose, manitol and maltose. Not pathogenic for mice when given by mouth or by intraperitoneal route. The microorganisms were recovered from feces of all mice inoculated by mouth. The bacteria was identified as *Proteus mirabilis*, apud Bergey's Manual. The presence of *Proteus mirabilis* was sometimes found in feces of not inoculated mice.

Intraperitoneal inoculation in guinea-pigs produced infection with death in the first 36 hours; when inoculated by subcutaneous route the death occurred within 96 hours. In this case there were necrosis in the site of inoculation, and enlargement of ganglia. The microorganisms were recovered from the organs and blood.

DISCUSSION

VARELA identified bacterial strains from feces of hamsters with infectious enteritis as *Pr. morgani*. This bacteria reproduced the disease in mice. In his work VARELA did not exclude the presence of *Proteus* in healthy animals.

SUMMARY

Proteus mirabilis must be considered a normal inhabitant of the intestine of hamsters. It is also found in the vaginal secretion of females of this animal, when in oestrus.

RESUMO

- 1) Os hamsters são parasitados pelos *Proteus*.
- 2) As amostras isoladas foram identificadas ao *Pr. mirabilis* de Hauser.
- 3) O *Proteus* isolado não revelou ação patogênica sobre camundongos mas se mostrou patogênico para cobaias.
- 4) O germen era presente na secreção vaginal de hamsters, na época do cio.

BIBLIOGRAFIA

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