Genital markers of T.G.K. virus connected with virulence are still unknown. Previous works on the infectivity of viral replication in tissue culture and in vitro stability of viral infectivity have been performed by some other investigators (e.g., VONKWIL 1968). The present study aimed to evaluate the stability of viral infectivity in different conditions. We have investigated the stability of T.G.K. virus infectivity in various media, such as serum, urine, and saliva, in order to determine the optimal conditions for the maintenance of viral infectivity.

**Material and Methods**

**Tissue culture.** Pig kidney cell lines, and T.G.K. strains have been used in the experiment. The T.G.K. strains have been previously described (LARGE et al., 1961). The virus was isolated from the tissues of infected animals and propagated in tissue culture. The virus was harvested at 3 different passages and was used in the experiments.

**In vitro infectivity.** In vitro infectivity was evaluated by measuring the cytopathic effect of the virus in tissue culture. The virus was diluted in serum-free medium and inoculated into tissue culture wells. The cells were observed under a microscope for the development of cytopathic effect.

**Results.**

**A. Stability of T.G.K. virus in serum.**

After storage at 4°C for 24 hours, the virus was found to be stable in serum. However, after storage at 37°C for 24 hours, the virus was found to be unstable in serum.

**B. Stability of T.G.K. virus in tissue culture.**

After storage at 4°C for 24 hours, the virus was found to be stable in tissue culture. However, after storage at 37°C for 24 hours, the virus was found to be unstable in tissue culture.

**Conclusion.** The results of the present study suggest that T.G.K. virus infectivity is stable in serum and tissue culture under certain conditions. Further studies are needed to determine the optimal conditions for the maintenance of viral infectivity.

**Acknowledgments.** The authors wish to thank Dr. J.C. WILSON for his valuable suggestions and Dr. J. SMITH for his helpful discussions.

Selected references:


**Keywords:** T.G.K. virus, infectivity, stability, tissue culture, serum.