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## SPERM CYTOTOXICITY TEST BY ANTI MALE MOUSE SPLEEN CELL SERUM

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The sperm cytotoxicity test was carried out to examine the titer of anti male mouse spleen cell serum. In addition, the effect of the antiserum on mouse embryo development was also studied.

In this study, three different methods of antiserum production were employed. Five females were assigned in each group. Antisera were produced in C57BL/6 female mice by repeated intraperitoneal injections of male mouse spleen cells. In group I, 3 injections were given at a dose of  $3 \times 10^7$  cells/injection, while 6 and 5 injections at a dose of  $2 \times 10^7$  cells/injection were given to groups II and III, respectively. The sperm cytotoxicity test was performed using the method of DOOHER & BENNETT (1977).

Increase in sperm cytotoxic activity (SCA) was detected in the sperm collected from 2, 1 and 3 mice in groups I, II and III, respectively. The antisera from the three groups were divided into increasing and non-increasing SCA.

One hundred and fifty-nine morulae from 32 ddY mice were cultured for 15 hours in BMOC-3 with 10% four-fold diluted guinea pig serum containing either 15 or 25% antiserum. In both concentrations, no difference in the percentage of degenerated embryos was observed after culture.

In groups I and II, the percentage of degenerated embryos was significantly higher in the culture containing antiserum with increasing SCA as compared to that of the non-increasing SCA ( $P < 0.01$ ).

The results of the present study showed that the sperm cytotoxicity test was effective in evaluating the titer of anti male spleen cell serum.