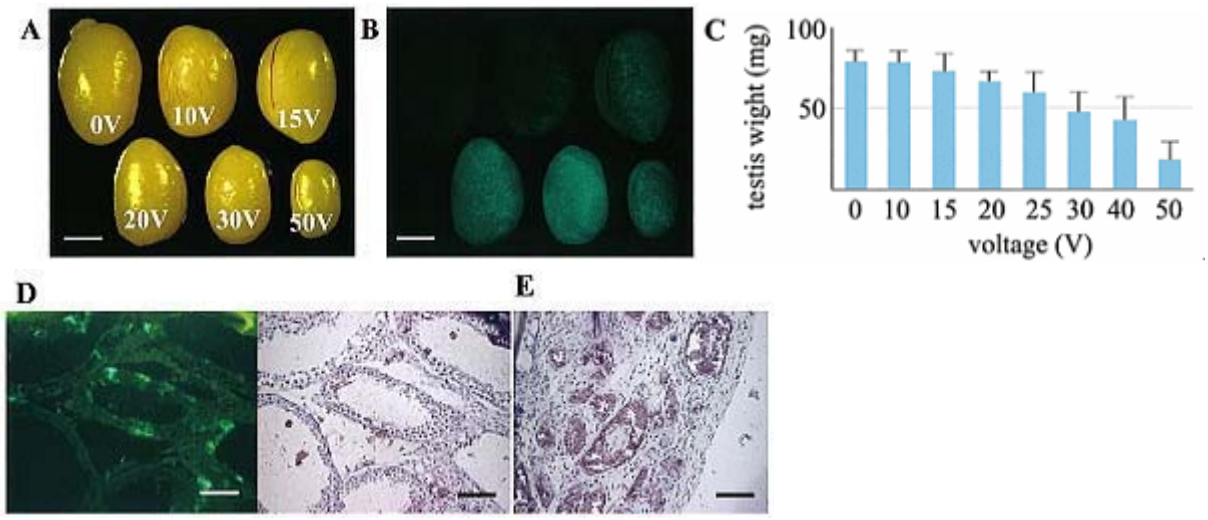
[Testis] Electroporated Transgene-Rescued Spermatogenesis in Infertile Mutant Mice with a Sertoli Cell Defect



Stereomicroscopic views of transfected testes charged with various voltages and observed under visible (A) or excitation (B) light after 5 wk. Voltage is indicated on each testis (A). Loss of testicular weight 5 wk after electric charge in 12-day-old testes (C). All values are means ± SD (measured number of testes charged with 0, 10, 15, 20, 25, 30, 40, and 50 V are 4, 4, 4, 12, 12, 15, 10, and 12, respectively). Cross-sections of a testis at 5 wk after being charged with 50 V, observed with fluorescence microscope under excitation light (D, left), followed by counterstaining of the same section with hematoxylin (D, right) or another section just stained with hematoxylin (E). In higher voltage charged testes, luminal enlargement of seminiferous tubules (D) or complete degeneration of seminiferous tubules under the capsule (D, left) was observed. In these testes, many fluorescence-positive Sertoli cells were identified easily (E, right), like in 20V charged testes (Day 35).
Bars = 2mm (A, B) or 100μm (D, E).

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[In Ovo] Misexpression of the gene of interest by in ovo electroporation