

P-21 The Effect of Cistanches Deserticola Y. C. Ma. on the Reproductive Performance in Mice

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Objectives: To investigate the effect of Cistanches Deserticola Y. C. Ma. (肉蓯蓉) on ovulation and in vitro development competence from pronuclear stage oocytes into blastocyst stage embryos in mice.

Materials & Methods: The decoction of Cistanches Deserticola Y. C. Ma. was administered to 4-week-old and 18-week-old mice, once a day for 4 days or 8 days. The total number of ovulated oocytes, the rate of morphologically normal oocytes, and the in vitro developmental competence from pronuclear stage oocytes into blastocyst stage embryos were observed.

Results: There was no significant difference between treated and untreated groups in the comparison of the body and ovarian weight after Cistanches Deserticola Y. C. Ma. administration for 4 and 8 days. The total number of released ova showed significant increase ($p < 0.05$) after 4-day administration in 4-week-old (treated) group. After 8-day administration, the total number of released ova and the normal ova rate showed significant decrease ($p < 0.05$) in 4-week-old (treated) group. The total number of released ova showed significant increase ($p < 0.01$) after 4- and 8-day administration and the normal ova rate showed significant increase ($p < 0.0001$) after 8-day administration in 18-week-old (treated) mice. In the comparison of the developmental competence from pronuclear stage oocytes into blastocyst stage embryos after 4- and 8-day administration, 4-week-old (treated) group showed significant increase ($p < 0.01, 0.01$) and 18-week-old (treated) group showed significant increase ($p < 0.01, 0.0001$).

Conclusions: This study shows that Cistanches Deserticola Y. C. Ma. has significant effects on the increase of the total number of ovulated ova and the rate of morphologically normal ova, and the in vitro developmental competence in 4- and 18-week-old mice.