blastulation between TCM (86.0%, 81.7% and 51.6%) and MEM (89.2%, 82.8% and 53.8%). But, BG1 and BG2 rate were significantly higher ($p<0.05$) in MEM (23.7% and 17.2%) than those in TCM (12.9% and 4.3%). Rate of clinical and singleton pregnancy and implantation were significantly higher ($p<0.05$) in MEM (57.9%, 47.4% and 22.0%) than those in TCM (30.0, 20.0 and 12.5%). However, there was no significant difference in twin pregnancy rate between TCM (10.0%) and MEM (10.5%).

Conclusions: MEM shows increased developmental capacity of oocytes and pregnancy rate of blastocysts compared to TCM in both mouse and human.

P-5 Administration Duration Dependent Effects of Morindae Radix Extract Solution on the Reproductive Capacities in the Mice

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Background & Objectives: These studies were undertaken to evaluate the effects of the different administration duration of Morindae Radix extract solution on the spermatogenic abilities such as concentration, motility and morphological normality of sperm from the testis and the activities of sperm hyaluronidase.

Method: We used the 8-week-old ICR mice and administered 0.3 mg/g extract solution of Morindae Radix once a day for 30, 60, 90 and 120 days. The control group was administered the normal saline in the same way and duration. We examined the number of total, motile and normal sperm from the cauda epididymis. And we compared the testicular tissue especially seminiferous tubules between control and treated groups by histochemical methods. At the end we observed the difference of sperm hyaluronidase activities between control and treated groups.

Results: The significant administration duraiton-dependent differences were observed in the concentration of total sperm, the motility and normality of spermatozoa of the Morindae Radix extract solution administered groups compared to the control group, respectively. In the histological analysis of the testicular tissues, the enlargement of testicular lobe diameter and apparent vasculogenesis between testicular lobes were observed in the Morindae Radix extract solution administered groups compared to the control group, respectively. Also, the activity of hyaluronidase was significantly increased in the Morindae Radix extract solution administered groups compared to the control group.

Conclusions: This study shows that the more beneficial effect has Morindae Radix extract solution on the concentration, motility and morphology of sperm, the testicular tissues and the activities of sperm hyaluronidase, for the more duration the mice administer it. We can suggest that Morindae Radix will be useful for the treatment of male sexual dysfunction and infertility.