P-5

# Transvaginal Ultrasound-guided Oocytes Collection in Superovulated Korean Native Cows

Hyo-Jong Lee[1], Tae-Young Kang[1], Seong- Keun Cho[2]
Jun-Kyu Park[2] Woo-Jin Son[1], Min-Cheol Choi[1],
Sang-Young Choe[1], Choong-Saeng Park[2].
[1] *College of Veterinary Medicine, Institue of Animal Medicine, Gyeongsang National University*
[2] *College of Agriculture, Gyeongsang National University*

The present study was carried out to evaluate the effect of superovulation treatments on ovarian responses, oocyte recovery rates and grades of collected oocytes using an ultrasound-guided transvaginal approach in Korean native cows.

Superovulation in cows was induced with two different regimenes; 1) FSH-decreasing dose(n=8); the cows were received twice per day for three days of the total dose of 400mg of FSH-p, 2) FSH-single dose(n=9); the cows were administrated a single dose of 400mg of FSH-p in 25% PVP. The Observation of visible follicles and collection of oocytes were performed 12 hours following the last FSH in FSH-decreasing dose group and 48 hours after the FSH-single dose injection. All visible follicles larger than 6 mm were punctured and aspirated with a 6.5 MHz convex-array ultrasound transducer designed for intravaginal use.

The mean number of visible follicles(>6 mm) was significantly($P<0.05$) higher in the FSH-decreasing dose treatment($22.8\pm1.9$) and FSH-sigle dose treatment($20.6\pm2.0$) groups than the non-treatment group($7.0\pm0.8$). The mean recovery rate of oocytes was not significantly($P<0.05$) different between the treatment and control groups, but the mean number of collected oocytes was significantly ($P<0.05$) higher in the FSH-decreasing dose treatment($12.6\pm1.5$) and FSH-single dose treatment($11.8\pm3.6$) groups than the non-treatment group($3.7\pm0.5$).

In conclusion, the FSH-single dose treatment at superovulation in cows for ultrasound-guided aspiration might increase the number of aspiratable follicles and the recovery rate of follicluar oocytes as the FSH-decreasing dose treatment.