

거의 동일한 시기에 수정을 시킬 수 있으므로 일정한 시기의 전핵 시기 배아를 동시에 동결하였기 때문이라고 생각된다. 따라서 보다 많은 수의 전핵 시기의 배아를 동결보존하는 것이 다태아 임신을 감소시킬 수 있고, 과배란 증후군의 발생이 예상되는 주기에서 심각한 합병증을 예방하고 후에 안전한 임신을 기대할 수 있다고 생각된다.

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Human Blastocysts : the Correlation Between Embryo Microscopical Assessments and Their Cell Number

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Production and transfer of blastocysts in the area of human IVF are now available as an ART program if it is ready for appropriate culture conditions. Also, selection of better morphological blastocyst among the embryos in the same cycle is absolutely important for human blastocyst transfer program to obtain high pregnancy rates. The objective of this study was to investigate correlation between the morphology by microscopic assessments of surplus blastocysts produced in human IVF program and their cell number obtained by differential labelling method. For these experiments, 76 surplus human blastocysts were obtained from 36 patients on day 5 after IVF, the embryos were classified to early (ErB), early expanding (EEB), middle expanding (MEB),

2expanded blastocyst (EdB) according to their blastocoel expansion and zona thickness. When the ovum size and zona thickness of the classified blastocysts were measured using micrometer, although the embryos were produced in the same culture condition, there were significant variances in ovum size (148.8-217.6 μ m) and zona thickness (1.2-14.4 μ m). Total blastomere cell number counted after hoechst staining was increased by two to three fold during the transition period from ErB (39.1 \pm 3.6) to EdB (89.6 \pm 3.3) stage on day 5 after IVF. ICM (11.9 \pm 1.8 - 22.2 \pm 4.3) and TE (24.5 \pm 3.6 - 70.0 \pm 7.7) cell numbers using differential labelling were also showed the increased pattern according to the developmental level. Especially, EdB which showed poor ICM morphologically also indicated the low ICM cell number after differential labelling. This demonstrated that there is good correlation between the morphological assessment and the cell number. The count of ICM and TE nuclei using differential labelling can be used as an important criterion, if it is accompanied with morphological assessments, in selecting the better embryos for improving the pregnancy rates in human blastocyst transfer program.

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비폐쇄성 무정자증으로 인한 남성불임의 치료

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서론: 난자내 정자직접주입법(ICSI)의 개발로 고환조직과 부고환에서 추출한 정자(TESE;testicular sperm extraction & MESA;microsurgical epididymal sperm aspiration)를 이용하여 수정과 임신이 가능하게 되었다. 그동안 이 방법으로 정자형성과정이