

Comparison of 2 single step culture media, G-TL™ and CSC, on embryonic development and blastocyst formation.

T. Okamura, M Ida, S. Fujioka, R. Mori, A. Fukuda and *Y. Morimoto

IVF Osaka Clinic, *HORAC, Osaka, Japan

【Objective】

Single step culture medium (single medium) has been used not only due to unnecessary medium change, but also higher blastocyst rate. The present study was conducted to compare the efficacy of the two commercially available single media, G-TL™ (G-TL; VitroLife) and Continuous Single Culture Medium (CSC; Irvine Scientific). G-TL containing hyaluronic acid was developed for dry incubator to observe by time lapse cinematography. On the other hand, CSC does not contain hyaluronic acid and was developed for conventional incubator.

【Methods】

Six hundred forty eight two pronuclear oocytes (2PN) by either cIVF or ICSI from 80 patients between July, 2014 and August, 2015 were used for analysis. Those 2PNs were cultured for 5 days in G-TL and CSC. Blastocyst formation rate , rate of good quality blastocyst and pregnancy rates were compared between the 2 culture media.

【Results】

Total blastocyst rate and good blastocyst rate for G-TL and CSC were 66.6% vs. 69.6% and

38.2% vs. 41.3% respectively. Hence, no significant differences were observed in both blastocyst formation rate (%) and rate of good quality blastocyst (%) between G-TL and CSC. In addition, pregnancy rates between the groups (G-TL: 66.7% vs CSC: 72.2%) were also similar.

【Conclusions】

G-TL™ was originally designed for time-lapse observation. The present study suggested that G-TL™ can be used either in dry or conventional incubator. Therefore, it is not necessary to change culture media up to incubator equipped with or without time lapse incubator as far as G-TL™ is used. G-TL™ is convenient to use at any laboratories.