G-TL SUPPORTS BLASTOCYST DEVELOPMENT IN LARGE VOLUME CULTURE AS WELL AS IN MICRO DROPLETS

In a study presented at the ACE meeting in the UK, Shaw and co-workers compared single step time-lapse medium (Vitrolife, G-TL) with sequential series media (Sage, Quinn's advantage) in large volume culture as well as micro drop culture. They found significantly higher day 5 blastocyst development rate in the G-TL group in both large and small volume culture.

Material and Methods

A retrospective study of single step time-lapse medium (Vitrolife, G-TL) and sequential series media (Sage, Quinn's advantage) in 4 well (1 ml) dishes (N=49; N=65) and Primo Vision time-lapse dishes (N=16; N=25) with embryos donated to research.

Results

There was no significant difference (p=0.38) at an average of 106 hpi (hours post insemination) in G-TL (N=66) and 106.7 hpi in QA (N=56). Neither did the rates of glucose consumption show a significant difference between the two media systems (p=0.56)

The blastocyst development rate in the G-TL group was significantly higher in both large and small volume culture, see Fig 1.

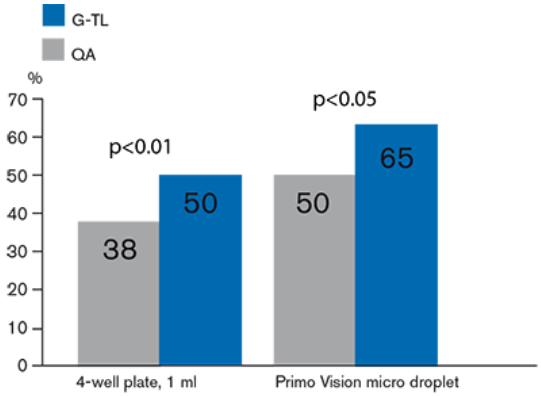

Fig. 1 Blastocyst development day 5

Discussion

When using G-TL for purpose, using micro droplet culture and Primo Vision time-lapse system, and comparing to standard sequential media, blastocyst development was significantly improved, despite that time to blastocoel formation did not differ significantly.

The authors conclude that the optimum culture media to support embryo viability is G-TL in Primo Vision culture dishes.

Ref: L.A. Shaw et al. ACE 2015 poster

Vitrolife

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