MORPHOKINETIC EMBRYO BEHAVIOR IN OOCYTE PRESENTING WITH DIMORPHISMS: AN ANALYSIS OF 1158 INJECTED OOCYTES

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INTRODUCTION

As a routine procedure in intracytoplasmic sperm injection (ICSI) cycles, denudation of retrieved oocytes allows the determination of maturation status and the assessment of morphological features of the cytoplasm, perivitelline space (PVS) and zona pellucida. Oocytes presenting extra and intracytoplasmic dimorphisms have been correlated to impaired embryo developmental potential and implantation. Timelapse imaging (TLI) systems allow for the mapping of morphological changes or events with the exact time-point of occurrence. The aim of this study was to investigate the relationship between oocyte dimorphisms an embryo morphokinetic events.



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CONCLUSIONS

Morphokinetic embryo behavior and embryo quality are positively related with oocyte dimorphisms, which was demonstrated by delayed cell cleavage and blastulation. This study adds to knowledge of oocyte quality role in embryo development. Dimorphic oocytes may have inefficient biological machinery. Significant differences, that could not have been noticed in a conventional incubator, were observed in embryo morphokinetic development when normal and abnormal oocytes were compared.

