

Are we intervening too late with embryo selection?

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Now that the wonderful world of early human development is plainly visible in the embryology laboratory, the belief that among the many cultured concepti, those most likely to establish and maintain a pregnancy are identifiable has entered mainstream ARTs. In its simplest form, and from the very beginnings of IVF, morphing from a single cell to a blastocyst over some 5 days in culture has afforded the informed observer the opportunity to grade embryos and thus infer their developmental chances. Over the past ten or so years, the purely subjective morphological screen has been embellished with the addition of prognosticative constructions whose market value is far in excess of the practical requirement to effect reliable embryo selection. Accordingly, this presentation has two goals. First, to review the latest technologies aimed at optimizing embryo selection. And second, share with the audience a paradigm shift that will require placing the burden of proof for predicting pregnancy chances NOT on observers of the conceptus, but rather properties of the gametes themselves that collaborate to produce a developmentally competent zygote. Emphasis is placed on the intraovarian processes that instill and effect in the nascent conceptus developmental autonomy established during the protracted course of oogenesis.