‘Mosaic’ embryos raise ethical concerns over IVF

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

The couple wanted a baby boy, but the male embryo they had chosen — the only one available after an expensive round of in vitro fertilization — received a troubling test result.

A handful of cells from the five-day-old embryo were deemed abnormal, apparently missing Chromosome 21, an absence that can lead to developmental defects.

Many couples having IVF would have reconsidered their choices. But the two women, aged 48 and 45, had the embryo implanted anyway. And despite the initial test findings, their baby was born healthy in 2014.

The test used on their embryo is called preimplantation genetic screening, or P.G.S., a biopsy performed by plucking a few cells from the developing embryo. Just a few years ago, P.G.S. was precise enough only to ascertain whether an embryo was normal or abnormal.

Now high-resolution, next-generation sequencing has sharpened the view, and researchers are finding something surprising: About 20 percent of embryos have both normal and abnormal cells, and the percentage increases with maternal age. These so-called mosaic embryos have long been known, but they have been detectable during an active IVF cycle only in the last year.

This and similar births are now provoking controversy among fertility experts about what to do if mosaics are the only viable embryos a couple has left after IVF. Should would-be parents discard them because they contain abnormalities? Or transfer them in the hopes of achieving a normal pregnancy?

Read full, original post: In IVF, Questions About ‘Mosaic’ Embryos