A new beginning

You start life as a fusion of an egg and sperm cell (zygote), known as an embryo. The embryo divides until it becomes a ball of cells, or blastocyst.

Around the sixth day, the blastocyst frees itself from the enveloping shell, or 'zona pellucida'. Through a series of expansions and contractions this tiny embryo bursts through the shell, leaving it behind. This process is called 'hatching'. Only a small proportion of embryos have the potential to become a pregnancy.

Add colour to this ball of cells. There are two types of cells in the blastocyst – the clump of inner cell mass on the left will develop into the foetus, and the rest of the cells (trophectoderm) around the outside become the placenta.

The bar at the bottom represents one tenth of a millimetre (100 micrometres). A blastocyst would neatly fit across the width of a human hair and could be seen as a tiny dot.



Reproductive Science A human blastocyst hatching from its shell

Y