

## **ASSISTED LOCALISED HATCHING IN CRYOPRESERVED BLASTOCYST TRANSFERS IN EGG DONATION PROGRAM**

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**Introduction:** Blastocysts escape the zona pellucida (ZP) via 'hatching or embryo eclosion'. ART techniques try to assist this process in vitro, 'assisted hatching' (AH). Despite the results, its effectiveness dose not seem to be totally clear.

**Objective:** Evaluate the results obtained from the embryo transfer of cryopreserved blastocysts which had previously undergone an AH process, differentiating between the AH carried out in the inner cell mass (ICM) and the trophectoderm—opposite the ICM (TRF)—in order to observe any differences.

**Material and methods:** The study, at IVI Murcia between November 2009 and January 2011, included 22 frozen blastocyst from patients enrolled in the egg donation program, randomly selected to undergo AH treatment using the laser zona thinning technique in the area corresponding to the ICM or TRF. Transfers were carried out on the same day. The results were analysed statistically using a Fisher test,  $p < 0.05$ .

**Results**

	AH ICM	AH TRP	P
n	11	11	
Age	38.8 ± 5	38.7 ± 5.6	
Pregnancy rate	90.9	54.6	0.149
Implantation rate	80.0	37.5	0.029

\*statistically significant . Fisher test,  $p < 0.05$

**Conclusions:** These preliminary results point towards a favourable trend in applying AH at the level of the ICM; this result would agree with other groups, defending the role played by IMC in the hatching process.