
 瑪麗醫院 QUEEN MARY HOSPITAL	Department of Obstetrics and Gynaecology	Document No.	OGRM 239b
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Information on extended culture of embryos

- Question: What is extended culture and what happens during extended culture?
 Answer: Usually you will be seen 2 days after egg collection when the embryos reach the “cleavage stage”. Extended culture of embryos means keeping these embryos in the incubator further until some of them develop into blastocysts on day 5 or 6 after egg collection. Whether cleavage embryos can develop into blastocysts depends on their genetic make-up and quality. When the embryos are of poor quality with low developmental potential or carry abnormal genetic make-up, they will not develop into blastocysts and will be naturally screened out.
- Question: Why should I choose extended culture?
 Answer: By selecting embryos with a higher chance to implant, transfer of a blastocyst has a higher live birth rate per transfer (up to 50% depending on age of women and other individual factors) than transfer of a cleavage stage embryo, thereby reducing the number of embryo transfers while reaching the same cumulative live birth rates. Due to the increase in the live birth rates with blastocyst transfer, you are advised to replace only one blastocyst per transfer, thereby reducing multiple pregnancy rates.
- Question: Who are the candidates for extended culture?
 Answer: Usually women with 3 embryos or more on day 2 after egg collection will be advised for extended culture. ***You can opt for extended culture even you have 1-2 embryos on day 2.***
- Question: What is the proportion of cleavage stage embryos developing into blastocysts on extended culture?
 Answer: About 50% of cleavage stage embryos on day 2 after egg collection can develop into blastocysts on day 5 or 6 after egg collection but the proportion can vary a lot depending on the quality of embryos. ***Please note that there may be a 2-6% chance of no cleavage stage embryos developing to transferrable blastocysts if you have more than 3 usable embryos on day 2. The chance of having no transferrable blastocysts after extended culture will increase to ~35% if you have 1-2 embryos on day 2.***
- Question: What should I do when no cleavage stage embryos develop into blastocysts on extended culture?
 Answer: We will replace an embryo with the most advanced stage of development when there are no blastocysts 5 days after egg collection when fresh transfer is planned. The remaining embryos will be assessed on day 6 and those cleavage stage embryos which develop into blastocysts on day 6 will be frozen for transfer later. ***Please note that there will no embryo/blastocyst frozen for later transfer if all cleavage stage embryos fail to develop to blastocysts on day 6 in patients planned to have elective freezing of all embryos.***
- Question: Will I have multiple pregnancy if I have only one blastocyst replaced?
 Answer: Yes, you will still have around 1% chance of having multiple pregnancy if one blastocyst is replaced. This is similar to natural conceptions.

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囊胚培養資料單張

- 問: 什麼是囊胚培養？在囊胚培養中會發生什麼？
 答: 病人一般會在取卵後兩天覆診，胚胎會在這一天達到卵裂期。在囊胚培養的過程中，胚胎在實驗室中繼續培養，直到第 5 或 6 天發育為囊胚。卵裂期的胚胎能否發育成囊胚取決於胚胎的遺傳基因和質量。當胚胎的質量差，發育潛力低或遺傳結構異常時，它們將不能發育為囊胚，並且會自然地被篩出。
- 問: 為什麼要選擇囊胚培養？
 答: 囊胚比卵裂早期胚胎具有較高的著床能力，因而有更高的活產比率（這取決於女性的年齡和其他個人因素，有機會高達 50%）。這樣可以減少胚胎的數量和胚胎移植的次數，同時達到相同的累計活產率。由於通過囊胚移植提高了活產率，建議每次僅移植一個囊胚，從而降低多胎妊娠率。
- 問: 什麼病人應該選擇囊胚培養？
 答: 我們建議在取卵兩天後有 3 個或更多卵裂期胚胎的病人進行囊胚培養。****即使你在取卵兩天後僅有 1-2 個卵裂期胚胎，你可以選擇囊胚培養。****
- 問: 在囊胚培養中，卵裂期胚胎發育成囊胚的比例是多少？
 答: 在取卵兩天後，卵裂期的胚胎大概有 50% 可在第 5 天或第 6 天發育為囊胚，但比例會因胚胎的質數而不同。****請注意，取卵兩天後有多於 3 個卵裂期胚胎進行囊胚培養過程者，有 2-6% 機會沒有可移植的囊胚。如果僅有 1-2 個卵裂期胚胎並選擇囊胚培養，則沒有可移植的囊胚的機率可增加至~35%。****
- 問: 如果在囊胚培養中沒有卵裂期的胚胎發育成囊胚，該怎麼辦？
 答: 如果取卵後 5 天沒有發育良好的囊胚時，我們將移植發育最前階段的胚胎。剩餘的胚胎將在第 6 天進行評估，那些在第 6 天發育為囊胚的會被冷凍以備後用。****請注意，如果計劃全胚胎冷凍的患者在第 6 天所有卵裂期胚胎都未能發育成囊胚，則不會有冷凍胚胎/囊胚用於將來移植之用。****
- 問: 如果我移植一個囊胚，我有多胞胎懷孕的機會嗎？
 答: 如果移植一個囊胚，你仍有 1% 的雙胞胎機會。這類似於自然懷孕。