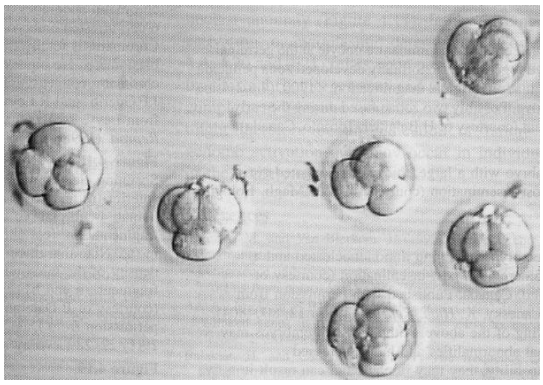
Choosing your best embryos

Why do we need to choose embryos for transfer or freezing?

Most patients will produce more than one embryo during their treatment cycle but we know that not all embryos will become babies – this is nature's way of making sure that only the 'best' or 'fittest' embryos become babies.

Is it obvious which embryos are the best?

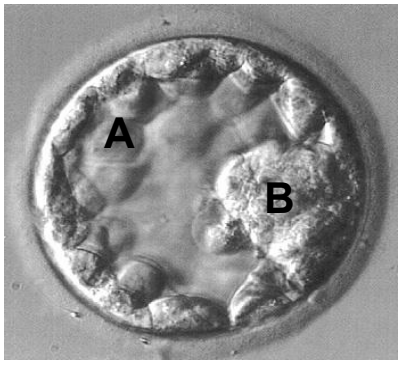
Not always. Sometimes it is very difficult to tell which embryos are the best, particularly when embryos are only three days old as several embryos from the same patient may look very similar at this stage. This photograph shows six embryos that all look very similar (two days after egg collection) from the same patient. I'm sure you'll agree that it would be difficult to choose one or two embryos based only on their appearance!



Is there a way of choosing the best embryos?

Yes. If you have a number of embryos to choose from that all seem to be of similar quality, we suggest that we allow all your embryos to continue to grow in the laboratory for five days after egg collection. What usually happens is that the 'best' embryos will continue to grow (to become something which is called a blastocyst) whereas those that were never destined to become babies will 'fall by the wayside' and stop growing. You might like to think of this as the 'best' embryos selecting themselves or 'survival of the fittest'.

What is a blastocyst?



A blastocyst is the name given to an embryo when it is about 5 or 6 days old. You can see a blastocyst in the photograph on the left. The part of the blastocyst labelled 'A' is the called the trophectoderm and will form the cells of the placenta. The part of the blastocyst labelled 'B' is called the inner cell mass and will form the baby.

Does everyone have their embryos grown to the blastocyst stage?

No. If you only have a small number of embryos then it may be possible to select your embryo three days after your egg collection. The Embryologist will advise you on the best day for transfer during your treatment.

Does growing my embryos to the blastocyst stage increase my chances of getting pregnant?

Possibly. There is some evidence available to suggest that blastocyst transfer may improve your chances of getting pregnant as the embryo has displayed its ability to develop. Your chance of getting pregnant is determined by many factors, including embryo quality, thickness of the endometrial lining (and its receptivity) in addition to your age. Your chances of pregnancy can be estimated by a doctor when considering all of these factors.

Are there any risks in keeping embryos to the blastocyst stage?

There is no strong scientific evidence that growing embryos to the blastocyst stage in the laboratory before they are transferred is harmful to the baby in any way. If you have a small number of embryos, there is a risk that none of the embryos will develop to the blastocyst stage resulting in no embryo transfer and/or embryo freezing. We use our clinical judgement to decide whether you are suitable for blastocyst culture. It is important to understand that poor embryo development is a risk that is present for anyone undergoing IVF treatment.

Further questions

If you have any other questions about how we choose your embryos please speak to a member of staff.

This leaflet can be made available in different formats on request. If you would like to make any suggestions or comments about the content of this leaflet, then please contact the Patient Experience Team on 0151 702 4353 or by email at pals@lwh.nhs.uk

The Hewitt Fertility Centre
Crown Street
Liverpool
L8 7SS
Tel: 0151 702 4142
Email: Hewitt.Centre@lwh.nhs.uk

4 The Pavilions
Knutsford Business Park
Mobberley Road
Knutsford
WA16 8ZR
Tel: 01565 653287