Dictation Week 11_Extra Practice

Listen to the dictation and complete the blanks. Write no more than THREE words for each answer.

Scientists have been able to do (1) _____ into an important, early stage of human development. They studied an embryo in its third week after (2) _____ — a moment in time that has previously been difficult to study.

European researchers looked at one embryo that was 16 to 19 days old. It was donated by a woman who (3) _____.

Until now, experts said, researchers have not had a full understanding of this stage of development because human embryos at this level of development are difficult to get. Most women do not yet know they are pregnant at that time. And global rules have until recently (4) _____ human embryos in a lab beyond 14 days.

The study appeared recently online in Nature, (5) _____. The study looked at "gastrulation," which begins about 14 days after fertilization and lasts a little more than a week. This is when the embryo is still about the size of (6) _____.

Shankar Srinivas of the University of Oxford was the lead researcher on the project.

Srinivas described gastrulation as "a process by which you have this kind of explosion of (7) _____."

Srinivas, who worked with other researchers in the United Kingdom and Germany on the project, added that during gastrulation different cells are formed. These cells, he explained, start to be (8) _____ in different places to form the body and (9) _____.

For many years, the so-called "14-day rule" on growing embryos in the lab has guided researchers, with some places, including the United Kingdom, writing it into law.

Earlier this year, the International Society for Stem Cell Research recommended easing the rule and allowing researchers to grow embryos past two weeks in some situations and after a (10) _____. But the rule remains law in the UK.

This research was not subject to the law because the embryo was not grown in a lab. But it is an example of the types of things scientists expect to learn more about if rules are (11) _____.

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Researchers found different kinds of cells, including red blood cells and other cells that give rise to egg or sperm cells.

But the researchers did not see (12) _____, Srinivas said, meaning embryos are not able at this stage to sense their environment.

Oxford University officials said this stage of development has never been fully mapped out in humans before.

The authors said they hope their work not only gives information about this stage of development, but also helps (13) _____ learn about how to make stem cells into particular types of cells that can be used to help (14) _____ or disease.

Robin Lovell-Badge, a stem cell expert at London's Francis Crick Institute who (15) _____ behind the guidelines, said being able to culture human embryos beyond 14 days "would be (16) _____ to understand not just how we develop normally but how things go wrong."

Dr. Daniel Sulmasy, director of the Kennedy Institute of Ethics at Georgetown University, said "those of us who are (17) _____ conservative" always thought the 14-day rule was somewhat arbitrary. Arbitrary is a term that means not (18) _____ for any particular reason. But, Sulmasy added, at least the rule "was some recognition of the (19) _____ of the embryo."

There will be more research on older embryos, he said. "Part of what science does is to always try to go forward and learn things that are new. And that continues to be a pressure. But the mere fact that we can do something is not (20) _____ to say that we ought to do it."

I'm John Russell.

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