Detecting Intra-uterine Group B Streptococcus (DIGS) participant information leaflet.

We would like to invite you to take part in a research study. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Please talk to others about the study if you wish.

Part 1 tells you the purpose of this study and what will happen to you if you take part.
Part 2 gives you more detailed information about the conduct of the study.

Part 1.

Q. What is the purpose of the study?
A. We aim to study samples obtained at the time of planned caesarean section to determine how often bacteria called Group B Streptococcus (GBS, also known as *Streptococcus agalactiae*) can get into the womb before labour starts and whether its presence in the womb stimulates the baby’s immune system or has other effects on the baby. We also want to test how the presence of GBS in the womb relates to the bacteria we find in the mum.

Q. Why have I been invited?
A. Because you are attending the Rosie Hospital for a planned, pre-labour caesarean section.

Q. Do I have to take part?
A. No, you do not have to take part. It is up to you to decide. We describe the study in this information sheet. If you are happy to be approached on the day you come in to have your baby, one of the research team will come and answer any questions you have about the project and, if you agree to take part they will ask you to sign a consent form. Even after you have done this, you are free to withdraw at any time, without giving a reason. This would not affect the standard of care you receive.

Q. I don’t want to be approached by a member of the research team on the day I come in. Can I refuse?
A. Yes, of course. If you would rather not even be approached, please do one of the following:
- (a) Call or text us (07521185522) and leave a message with your name, date of birth, or just your hospital number
- (b) Email us (cuh.digs@nhs.net) and send us a message with your name, date of birth, or just your hospital number
- (c) Write to us (Prof Gordon Smith, Department of Obstetrics & Gynaecology, Box 223 The Rosie Hospital, Robinson Way, Cambridge CB2 0SW) and let us know.

Q. Will my routine care be affected by participation?
A. No. Your routine clinical care will be the same whether you participate in the study or not.

Q. Will any findings from me or the baby be fed back to me personally.
A. No. All of the analyses are taking place for the purposes of research and we will not feedback any individual information to you about the results of any tests we perform on your samples as part of participation in the study.
Q. What will happen to me if I take part?
A. You will be approached by a member of the research team on the day of your caesarean section (before you go to theatre) who will explain the study, answer any questions you have, and obtain your signature on a consent form. When you go into the operating theatre, your treatment will be exactly the same as normal, but with the following additions. First, we will obtain a blood sample prior to the caesarean section. If possible, this will be obtained by the anaesthetist when they insert an intravenous line (cannula), resulting in no additional needle pricks for yourself. You can, however, decline to have this sample taken. Second, a nurse or midwife always passes a catheter into your bladder before a caesarean section. If you consent to the study, they will also briefly (seconds) insert a swab into the lower vagina and a swab into your back passage (rectum) to check for the presence of the GBS bug. This is usually done after you have had your anaesthetic (usually a regional block) hence this should not cause you any discomfort. But if you would rather not have a swab obtained from the back passage you can check a box on the consent form stating that you want to opt out of that. Third, when the surgeon is about to deliver the baby they will obtain a sample of the fluid from around the baby and we will check this for the presence of the GBS bug. The surgeon routinely makes a hole in your membranes prior to delivery. The fluid around baby is then easily collected by using a syringe to collect a small sample of the fluid around baby from this hole in the membranes. Is this is not possible during your operation a syringe will be used to collect fluid from the sterile towels in theatre. When the surgeon delivers the placenta, it will be passed on to the research team who will obtain further samples. Finally, we will collect information about why your caesarean section was being done and any complications or medical issues you experienced in the pregnancy, or before the pregnancy. We will collect information on the weight and sex of your baby, and whether you or the baby developed any complications or needed additional treatment after the delivery up to the point when you and the baby are discharged home.

Q. What do I have to do?
A. To take part, you simply need to sign the consent form.

Q. What are the possible disadvantages and risks of taking part?
A. If we need to obtain a blood sample from you there is the risk of mild discomfort and mild bruising afterwards, although you can decline to have blood taken. Otherwise, there are no risks to you or your baby.

Q. What will happen to the samples?
A. The samples will be analysed by the research team to study GBS in the womb. The team will also store samples for other studies which may take place in the future. Finally, the team will also obtain samples for “biobanks”, specifically cord blood for the Cambridge Blood and Stem Cell Biobank and tissue samples for the Centre for Trophoblast Research Placental Biobank. These are repositories of tissue samples which are made available to a number of different researchers. All samples passed on to these biobanks will be completely anonymous, i.e. there will be nothing at all that links the samples to you. The work done on the biobank samples is discussed more in Part 2.

Q. What are the possible benefits of taking part?
A. There are no potential benefits for you personally. But if we can understand more about how GBS affects the baby it may help other women and their babies in the future.

Q. What happens when the research study stops?
A. We plan to store the samples we obtain indefinitely. We propose to do this as the samples are potentially useful for other researchers who are trying to understand what causes complications in mums and babies.
Q. What if there is a problem?
A. Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2.

Q. How will my personal information be used?
A. In this research study we will use information from your medical records and your baby's medical records. We will only use information that we need for the research study. We will let very few people know your name or contact details, and only if they really need it for this study. Everyone involved in this study will keep your data safe and secure. We will also follow all privacy rules. At the end of the study we will save some of the data for future research. We will make sure no-one can work out who you are from the reports we write. Part 2 of the form tells you more about this.

Part 2.

Q. What will happen to the samples I give for the DIGS study?
A. The samples will be stored securely and indefinitely. The samples will be stored in locked freezers which are in turn kept in a secure locked area. We will test samples for the presence of the GBS bug. We will measure indicators that the bug has stimulated the immune system. We will look at the genetics of the bug and see if we can identify why sometimes it seems to invade the womb and sometimes it does not. But it is impossible for us to describe every test which we might perform on your samples as it is likely that new tests will become available in the future. It is also possible that we might identify a novel test for complications which has commercial value. The expression used in this situation is that you donate your samples as a "gift". i.e. that by consenting to the study, you allow us to analyse the samples in any way we wish in the future that advances scientific knowledge. We may also pass samples on to collaborating researchers. These collaborators may be overseas, and may also include commercial collaborators. All your personal information will have been removed and the other researchers will be unable to identify you. We will only pass on samples which are identified by a code number and we will not pass on information that allows external collaborators to identify you. You will not profit from any future study or collaboration that uses your sample.

Q. What will happen to the samples that go to the Cambridge Blood and Stem Cell Biobank?
The Cambridge Blood and Stem Cell Biobank is run by a medical doctor, Prof Brian Huntly, who is a haematologist (a specialist in blood disorders). The sample which will be passed on to this team is blood which is taken from the placenta and umbilical cord. This is your baby's blood but what is present in these tissues is normally discarded, i.e. the sample does not take any blood away from your baby. This team primarily studies the white blood cells in the cord blood. Their main activities are analysing blood cells (e.g. measuring chemicals such as proteins), studying the genetics of blood cells (e.g. sequencing of DNA), producing long lived cultures of cells (called cell lines) and, occasionally, using the cells in animals to study human disease or test new treatments. The consent form allows you to opt out of your samples being used to create long lived cell lines and you can also opt out of your samples being used in animal experiments, as we appreciate that there are some people who object to this type of work. We will provide the Cord Blood Biobank with untraceable information about your pregnancy, such as the gestational age and weight of the baby. However, the information and samples which we pass on will be completely anonymous.

Q. What will happen to the samples that go to the Placenta Biobank?
The Placenta Biobank's full title is the Centre for Trophoblast Research Placental Biobank and it is led by a scientist, Prof Kathy Niakan. The main sample to be passed on to this biobank is the placenta, but we may also pass on samples from the membranes, umbilical cord and cord blood. The size of placental samples may be anything from small fragments to most of the placenta. There are multiple ways that they use the samples, depending on which scientists are planning to work on it. They may isolate placental cells (called trophoblast)
which requires large quantities of the placenta. However, often they are taking small fragments of tissue which they may use to measure molecules, study genes (including sequencing DNA), or they may examine samples under the microscope. We will provide the Placenta Biobank with untraceable information about your pregnancy, such as your age, the weight of the baby and whether you experienced any major complications in the pregnancy. However, the information and samples which we pass on will be completely anonymous.

Q. What will happen if I don’t want to carry on with the study?
A. You can stop being part of the study at any time, without giving a reason. You can also request that we destroy all samples and information that we have collected and not to access your medical records. If you decide you do not wish to continue, please call us on 07521185522, email us (cuh.digs@nhs.net) or write to us (Prof Gordon Smith, Department of Obstetrics & Gynaecology, Box 223 The Rosie Hospital, Robinson Way, Cambridge CB2 0SW) and let us know.

Q. Will I be able to request that my samples are destroyed?
A. Yes. If you decide that you no longer wish to take part in the study, we will ask you whether you want us to destroy all the samples we have collected. If you opt to have your samples destroyed we will do this. If you do not request us to destroy the samples we may still use them as described in this leaflet. In the extremely unlikely event that you lose the capacity to consent for the study (e.g. a serious illness), we will continue to use the samples collected prior to that point. However, if you withdraw after we have passed your samples on to either of the biobanks, the biobanks will not be able to destroy your samples as we give them no information that allows them to link a sample to a specific person.

Q. Will any genetic tests be performed?
A. Yes. Both the DIGS study and the biobanks may perform genetic analysis. It is impossible for us to list every possible genetic test. Again, therefore, you would be allowing us to use these samples as a gift, i.e. that you would be giving us permission to do whatever genetic analyses we would see as helpful, for example, in identifying new tests for complicated pregnancy. We will not inform you of the results of any genetic analyses. We will not reveal these results to any third party outside the sphere of research, such as an insurance company. Moreover, the Association of British Insurers will not ask for nor take into account the result of any genetic test done for the purposes of research. Hence, the genetic testing we perform will have no impact on you, positive or negative.

Q. What if there is a problem?
A. If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions (telephone 01223 769262). If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. The office dealing with complaints is the Patient Advice and Liaison Service (PALS). You can write to them at Patient Advice and Liaison Service (PALS), Box 53, Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 0QQ, call them on 01223 216756 or email them at pals@addenbrookes.nhs.uk. In the event that something does go wrong and you are harmed during the research and this is due to someone’s negligence then you may have grounds for a legal action for compensation against Cambridge University Hospitals NHS Foundation Trust but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you. Cambridge University Hospitals NHS Foundation Trust, as a member of the NHS Clinical Negligence Scheme for Trusts, will accept full financial liability for harm caused to participants in the study caused through the negligence of its employees and honorary contract holders. There are no specific arrangements for compensation should a participant be harmed through participation in the study, but no-one has acted negligently. The University of Cambridge will arrange insurance for negligent harm caused as a result of protocol design and for non-negligent harm arising through participation in the study.
Q. How will we use information about you?
A. We will need to use information from you and your baby’s medical records for this research project. This information will include your name, hospital number, NHS number, date of birth and address. People will use this information to do the research or to check your records to make sure that the research is being done properly. People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number instead. We will keep all information about you safe and secure. Some of your information may be sent to collaborators in other countries, but your samples would only be identified by a code number and they must follow our rules about keeping your information safe. Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

Q. What are my choices about how my information is used?
You can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have. We need to manage your records in specific ways for the research to be reliable. This means that we won’t be able to let you see or change the data we hold about you.

Q. Where can I find out more about how my information is used?
You can find out more about how we use your information:
- at www.hra.nhs.uk/information-about-patients/
- a leaflet available from www.hra.nhs.uk/information-about-patients/
- by asking one of the research team
- by sending an email to gdpr.enquiries@addenbrookes.nhs.uk.
- by ringing us on 07521185522

Q. Will my GP be involved or informed?
A. As we are simply collecting samples at the time of birth there is no need for us to involve or inform your GP.

Q. What will happen to the results of the research study?
A. We will publish the results of this research in scientific journals. We will place details of our findings on the Department of Obstetrics & Gynaecology web site (see below). However, no-one will be able to identify you as one of the participants in the study.

Q. Who is organising and funding the research?
A. The DIGS study is funded by the Medical Research Council and is also supported by the National Institutes of Health Research, the Research & Development arm of the NHS. The study is jointly sponsored by Cambridge University Hospitals NHS Foundation Trust and the University of Cambridge.

Q. Who has reviewed the study?
A. The scientific case for performing the study was assessed by the Medical Research Council who sent the study description to five external peer reviewers for detailed assessment and it was then approved for funding by a panel of >20 senior academics. The ethics of the study was assessed by an independent group of people, the Essex Research Ethics Committee. Their role is to protect your safety, rights, wellbeing and dignity. Both the scientific case and ethics of the study have been reviewed and given favourable opinion.

Q. Contact for Further Information
A. Prof GCS Smith. The research going on in the Department of Obstetrics & Gynaecology is described on the web site (http://www.obgyn.cam.ac.uk/) and, ultimately, the results of this study will be posted there as well. If you have any specific queries, you can also write to the department at Box 223, The Rosie Hospital, Robinson Way, Cambridge, CB2 2SW or telephone 01223 769262.