5. How can I plan for a safe pregnancy and birth?

A guide to help women with cystic fibrosis make informed choices

How can I plan for a safe pregnancy and birth?

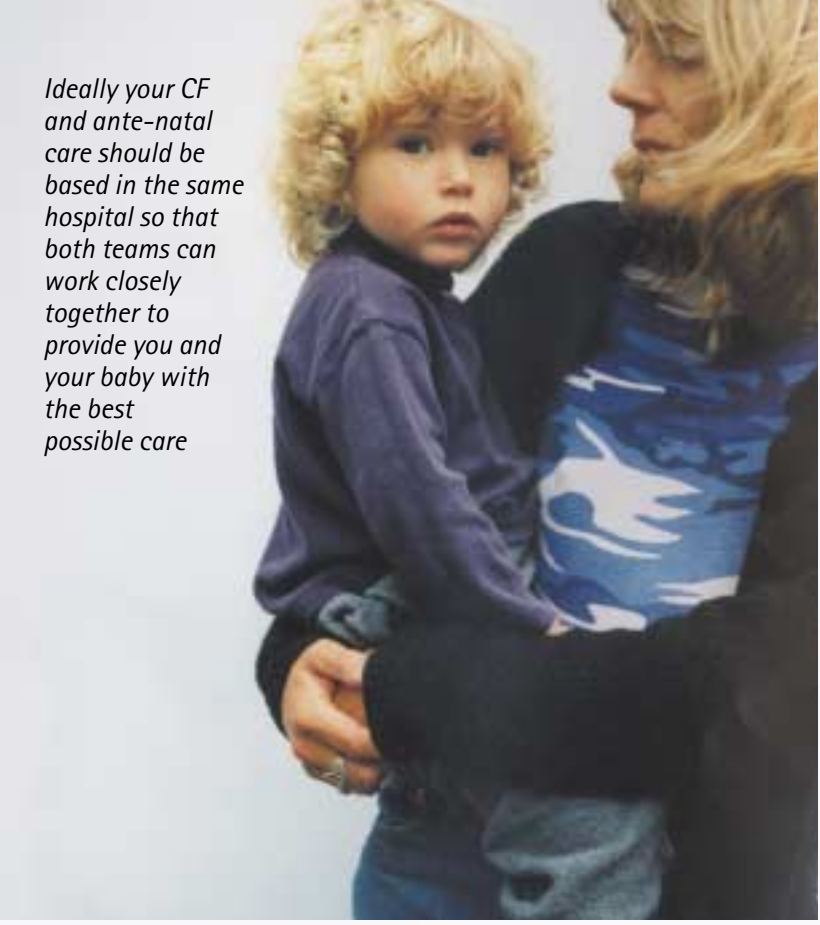
If you and your partner have weighed up all the pros and cons and decided you wish to try for a baby, then you need to begin by planning your pregnancy. Ideally your CF and ante-natal care should be based in the same hospital so that both teams can work closely together to provide you and your baby with the best possible care.

Preparing for pregnancy

In almost all cases pregnancy is best planned and this is even more important when you have CF. You should feel free to discuss whether your partner is to be genetically tested and what decisions you may have to make if he is a carrier for CF. It is particularly important to consider who will care for the baby if you become unable to continue to do so.

Even before pregnancy a course of antibiotics may be necessary to maximise lung function. It is also advisable to have a cervical smear test before you become pregnant to make sure that the neck of your womb is healthy. Nutritional advice is also important before trying for a baby and to give you advice about foods to avoid during pregnancy. Blood tests should be done to show whether you have immunity to Rubella (German Measles) and appropriate levels of vitamins (especially A or D). Like all women you should take a daily supplement of folic acid (folate) three months before and until the 12th week of pregnancy to reduce the risk of spina bifida (this is not increased in CF). Iron is not essential unless it is actually reduced in the blood.

Although most drugs used in CF and almost all important antibiotics are believed to be safe (see following section) drug treatment may have to be adjusted. It is probably unwise to try for a baby while you have a chest infection.



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During pregnancy

It is also very important to have physiotherapy during pregnancy because your sputum may become thicker and infection can develop in 'trapped' sputum in the lower part of the lungs. As your 'bump' becomes bigger different physiotherapy techniques may be needed – for instance when tipping becomes difficult – so discussion with your physiotherapist is important. You will also need to learn and practice pelvic floor exercises to help you after the birth. These exercises are designed to prevent stress incontinence – ie. leakage of urine during coughing bouts and also help to improve your enjoyment of sex.

Lung function, weight gain and blood sugar levels need to be monitored regularly and you may need to be seen by the obstetrician every month or so increasing to every two weeks after the 28th week.

Infections in pregnancy

Severe infection is much more likely to harm the baby than antibiotics, especially if oxygen levels are low. You should be prescribed the best antibiotics for the infection that are also safe for the baby. Severe infection towards the end of pregnancy may require the baby to be delivered early.

Drugs best avoided during pregnancy

Obviously it is never possible to test drugs on pregnant women to be sure that they are completely safe for mother and baby. However, drugs are tested on animals and where there is a known risk to animals during pregnancy, it is wise to avoid these drugs when suitable alternatives are available. From experience some drugs are known to be unsafe in pregnancy and these obviously should be avoided.

The drugs that are used in CF treatment which are best avoided during pregnancy include:

Ursodeoxycholic acid – Trimethoprim, Septrin, Tetracyclines, IV Colistin.

If you have any doubts about taking drugs that are prescribed for your CF while you are pregnant, talk these over with your consultant/pharmacist. Hopefully you will be reassured that the risks to your baby of not taking the treatment are much greater that any risk from the drugs.

Drugs that are best avoided during pregnancy include:
Trimethoprim, Septrin, Tetracyclines** and **IV Colistin

Diabetes in pregnancy

For people with diabetes who are planning a pregnancy the goal is to obtain as normal sugars as possible (4-7 mmols) preconception. This should then be maintained throughout the pregnancy. To obtain tight control, blood sugar tests need to be performed up to seven times a day, before and after each meal. This involves a huge commitment to perform all of these tests.

The reason why it is important to control blood sugar levels is to prevent the development of fetal abnormalities in the first trimester or complications that may occur later in the pregnancy. Examples of these possible complications are large babies, (which may lead to a difficult labour), breathing problems for the baby, or low blood sugars post birth for the baby, (which may lead to the baby being admitted to the neonatal unit for a time). Monitoring is required throughout the pregnancy as insulin requirements increase during pregnancy and this may lead to an increase in low blood sugars if monitoring is not performed regularly.

It is important to maintain a healthy diet for both mother and baby ensuring that they both receive all the nutrients they require to maintain a healthy pregnancy. Sugar intake must be reduced to a minimum. This involves using sugar free foods and avoiding chocolate and refined sugar to prevent rapid rises in blood sugars. It is also recommended that folic acid should be taken pre conception at a dose of 5mg.

Your insulin regimen may change to 4 times a day to obtain optimum control if you were previously on twice daily insulin. If you take Humalog this would need to be changed and this is best done before you become pregnant.

Diabetes may develop during pregnancy and again good control is to be aimed for. This again requires frequent bloods test and control of sugar in the diet. Insulin may be required if control cannot be obtained by altering diet alone. Pregnancy induced diabetes may disappear following delivery but may persist, requiring the continued use of insulin.

The risk of miscarriage or early delivery

Any pregnancy carries a risk of miscarriage. Around 10% -15% of all recognised pregnancies end in miscarriage and the actual percentage is likely to be higher as some pregnancies are miscarried before they are confirmed. There is no clear evidence to suggest that women with CF are at any greater risk of miscarriage.

As long as the mother and baby remain healthy then most pregnancies should last the full 40 weeks. Earlier delivery is likely if you are carrying more than one baby or if your health requires some earlier intervention.

Further information about miscarriage is available from: *The Miscarriage Association, c/o Clayton Hospital, Northgate, Wakefield, West Yorkshire, WF1 3JS. Tel 01924 200799*

Delivering the baby

If lung function is good, normal vaginal delivery is safe and preferred but you may need assistance by forceps or other methods if you get tired. If there are complications for either you or your baby, caesarean section is usually preferred. In both cases good pain relief is required partly to help in the delivery and partly to reduce fear, anxiety and tiredness and allow you to continue with physiotherapy. Many obstetricians prefer to use an epidural or spinal anaesthetic and experience has shown this to work well in CF.

After delivery

You will probably stay in hospital for a few days to rest, receive help with physiotherapy and possibly to have antibiotics. It is also important that you are able to eat and that your bowels begin to work normally.

Breast-feeding

The breast milk in CF is normal and so breast-feeding is certainly possible. However the main concern is the extra demands breast-feeding makes on your health. Recommendations about breast-feeding should therefore be made on an individual basis. During breast-feeding all women use up an extra 500k calories per day. Thus if a mother who has CF is already underweight, breast-feeding can lead to further weight loss. Those who choose to breast feed should increase their food intake to make sure that their weight is maintained.

On the other hand, breast-feeding is hard work and takes up much of a mother's time and energy and may leave you less time to carry out your routine CF treatments. Thus women with CF should be careful to avoid compromising their own health because of breast-feeding and you should not feel guilty if you decide not to breast feed because of this. If you are unwell after the birth or on antibiotics that might be passed on to the child through breast feeding, this may mean that breast-feeding should be avoided.

Can I have more than one baby?

If you are well and had no significant problems with the first pregnancy, the risks of a second pregnancy are probably no greater than the first but lung function may be less good. There are a number of women who have CF with 2 or 3 healthy children.

Further information *The CF Trust has a booklet called Having a baby which has more information about pregnancy and CF. Tel 020 8464 7211*

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Leaflets in the series:

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H1246f/WBR/February 2003

Written by Barnardo's in conjunction with Nottingham City Hospital CF Unit and produced on their behalf by Forest Laboratories UK as part of the Directions educational programme.

Views expressed are those of the authors and not necessarily those of Forest Laboratories or Nottingham City Hospital.

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