

ACHA Q and A: Birth Control for Women with Congenital Heart Disease

There are approximately 500,000 adult women living with congenital heart disease (CHD) in the United States. The great majority wish to be sexually active. Like all women, they need to be able to plan if and when to have children.

The risk of pregnancy for women with CHD ranges widely. For some women their risk is no different from that of the general population. For others it will carry up to a 50% chance of death. For these women birth control is more than just a method to conveniently space babies. It may prevent a life-threatening pregnancy.

This brief article discusses the available methods of birth control and describes which may be suitable for women with different types of ACHD. This is not a definitive guide. Each person has her own risks. You should ask your ACHD doctor which method is best for you.

Who can advise me about contraception?

The first difficulty facing many women with CHD is to find a doctor who understands both their heart condition and how different birth control methods may affect it. Many family doctors are experts in birth control but not in complex congenital heart disease. Similarly, many ACHD cardiologists have a limited understanding of birth control methods. As a result women with CHD may be needlessly denied birth control options. This can leave them more at risk of a high risk pregnancy. They also may be prescribed a birth control method that carries a risk to their heart condition. All women with CHD should have access to an ACHD specialist who is also an expert in contraception.

What do I need from my contraceptive?

Every woman with CHD needs to speak to an ACHD cardiologist familiar with the latest information on birth control. S/he should discuss the woman's situation and advise her about her risks from pregnancy. These risks can vary greatly even among women with the same diagnosis. This is why individual counselling is so important.

For every method of contraception, two factors must be considered:

- How effective is it? (i.e., How good a contraceptive is it?)
- How safe is it for my heart?

What methods are available?

There are four main types of birth control methods available:

1. **Barrier methods** (i.e., condom, diaphragm)
2. **Hormonal methods**, including:
 - Combined methods (estrogen and progestin)
 - Combined oral contraceptive pill

- Long acting contraceptives such as the patch (Evra) and injectable (Lunelle)
- Progestin-only methods
 - Minipill and Cerazette
 - Morning-after pill (Plan B)
 - Long acting contraceptives such as
 - Depo Provera (injectable)
 - Implanon (implantable)

3. Intrauterine devices

- Traditional copper coil
- Progestin releasing coil (Mirena IUS)

4. Sterilization

Can I use a condom or diaphragm by itself?

These are safe for all users. Condoms have the added advantage of preventing STDs (sexually transmitted diseases). However, they are "operator-dependent." Their effectiveness depends on consistent use. This means they may not be a good choice if you are at high risk from an unplanned pregnancy.

Can I take birth control which contains estrogen? (i.e., the combined pill, Evra patch, Lunelle)

The combined oral contraceptive pill (COC) is one of the most popular methods of birth control. It is reliable and causes few side effects. It can also make your period more regular. However the estrogen in the pill increases the risk of blood clots (thrombosis). Women whose heart condition also puts them at risk of blood clots should not use it. It should also be avoided in women with high blood pressure and migraine. The risks should be considered the same for the Evra patch and the injectable Lunelle.

The risks of the estrogen-containing birth control will depend on your heart condition. In general it should be avoided by women with the following:

- Risk of blood clots (thrombosis)
- Migraine
- Artificial valves
- Certain kinds of heart rhythm problems
- Poor heart function
- Complex hearts such as the Fontan
- Cyanosis (being "blue")
- High lung pressures (pulmonary hypertension)

What progestin-only birth control can I use?

Progestin-only methods are safe for all heart conditions. However, different methods are more or less effective. They also differ in how they are given. Progestin-only contraceptives often cause irregular bleeding. This is especially true in the first months of use. Over time women who use these methods may stop having menstrual bleeding altogether. Many women see this as a nice side effect.

Can I use the mini-pill?

The minipill also known as POP (progestin-only pill) is safe, but not very effective. It is a poor choice if it is important to prevent a risky pregnancy. Some brand names are: Camila, Errin, Jolivet, Nor-QD, Ortho Micronar, and Ovrette.

Cerazette is a new progestin-only pill, available in Europe, but not yet in the United States. It is safe for all women with ACHD. It is as effective as the combined birth control pill. This should be a good option if/when it becomes available in the United States.

Can I use the morning-after pill?

The morning after pill (Plan B) is safe for all women with ACHD. It is very effective. If you have a birth control accident you can still safely **prevent** a pregnancy. In the United States, Plan B is available to women 18 years and older without a prescription at most pharmacies. Women must show proof of age to purchase Plan B. For women 17 years old and younger, Plan B is available only with a doctor's prescription. If you do not have a regular doctor you can go to a prescription, you should contact Planned Parenthood (call 1-800-230-PLAN) to see if they have a clinic in your area they can recommend.

Can I use an injectable or implantable method?

Depo Provera is a highly effective injectable method of contraception. It must be given consistently every three months. It is safe for all women with ACHD. If you take "blood thinners" (i.e., warfarin, heparin) you may bruise at the injection site. Menstrual bleeding may stop altogether after the first few months of use. It is important to know that fertility returns to normal rapidly if you stop taking it. You can get pregnant even before your period returns.

Implanon is an extremely effective method. It is a small plastic rod inserted under the skin of your upper arm. It is safe for all women with ACHD. It lasts for three years, but can be removed at any time if you want to become pregnant. Menstrual bleeding stops in approximately one in five women. However, some women experience problems with irregular bleeding. If these problems continue, it is sometimes necessary to remove the rod and change to an alternative method.

Can I use an IUD?

A new option for women with CHD is the **Mirena IUS**. The Mirena IUS is a type of IUD that slowly releases progestin over five years. It is extremely effective and often causes menstrual bleeding to stop. Unlike some other IUDs, the risk of heart infection (endocarditis) is low. But it is probably best avoided if your doctor thinks you are at very high risk of heart infection.

The main risk associated with Mirena is at the time of insertion. The cervix has to be dilated. Even with local anaesthetic and a skilled operator, insertion can be uncomfortable. This is especially true for women who have not had a previous vaginal birth. The pain can be enough to make approximately one in 20 women feel faint which can be risky for some women (those with pulmonary hypertension or a

Fontan heart). This risk should be discussed with your doctor before choosing this option. If chosen it is especially important to use a skilled operator familiar with ACHD patients.

What about the traditional copper IUD?

This is also very effective, but it carries a higher risk of infection than the Mirena. It also tends to cause heavy menstrual bleeding. The risks of insertion are the same as for Mirena. If you are going to get an IUD, the Mirena IUS is likely to be a better option.

What about sterilization?

If you have decided never to have a baby then this is an option. However it is important to know that sterilization is not 100% effective. In fact, Implanon and Mirena are more effective than sterilization. In addition, the procedure is performed under general anaesthetic with a telescope (laparoscope). This carries a risk if you have severe CHD.

There is a new sterilization technique called Essure. Microinserts are inserted via the vagina to block the Fallopian tubes. The risks are less than with surgical sterilization and are similar to insertion of the Mirena IUS. There is less information about the long term effectiveness of this method but it is likely to be as effective as surgical sterilization. This is a promising future option for women with CHD.

What about sterilization for my partner?

This is 100% safe for you, but only if you have no other sexual partners. Therefore, like all sterilization it is not 100% effective. You and your partner also need to consider the difficult issue of how he might feel in the future if something happened to you.

And finally . . .

There are many birth control methods available for women with ACHD. This means that, however complicated your heart, there is a method that is safe and effective for you.

If your doctors cannot advise you or refer you to someone who can, please contact the Adult Congenital Heart Association (ACHA).

Thank you to Dr. Sara Thorne, Disty Pearson, Donna Smith, and the other members of the ACHA Publications Committee for their work on this article. ■

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