



Postural Tachycardia Syndrome (PoTS and Pregnancy)

PoTS most commonly affects women of child-bearing age and therefore the effect of PoTS and its management in pregnancy needs to be considered.

Some women with PoTS may have concerns about:

- the use of PoTS medication whilst they are pregnant
- potential worsening of symptoms during pregnancy
- potential effects that PoTS may have on their baby

This leaflet aims to address these concerns and offer specialist advice.

Happily, most women with PoTS will have a normal pregnancy and deliver a healthy baby with minimal complications. This leaflet may also be helpful to you if you have Hypermobile Ehlers-Danlos Syndrome / Hypermobility Spectrum Disorder (an inherited condition affecting connective tissues including joints, skin, gut; many affected people also have PoTS).

Planning a pregnancy

It is advisable to plan your pregnancy with your GP and other medical teams to maximise the chances of the best outcome for yourself and your baby. It is important to know that PoTS does not appear to be associated with an increased risk to either yourself or your baby.

Planning a pregnancy before you start trying to become pregnant is particularly important if you are on medication for PoTS. The very early stage of pregnancy, when you are not aware that you are pregnant, can be a time of significant risk. It is important to continue to take your medication regularly and to weigh up the risks and benefits of continuing or stopping any medication with the doctors who manage your PoTS. Medication should not be stopped before review and discussion, ideally pre-pregnancy, with your medical team. This section will outline the pregnancy related safety considerations of medication commonly used in PoTS.



Beta blockers are often used in PoTS. Propranolol, and especially labetalol, have been used extensively during pregnancy and breast feeding in other medical conditions including pre-eclampsia (high blood pressure in pregnancy), with few.

Bisoprolol is a newer beta blocker and there is less available information about its use in pregnancy. It is not yet possible to comment upon bisoprolol's safety.

Fludrocortisone has been used for many years to treat Addison's Disease (a condition in which the adrenal gland malfunctions) in pregnancy without any documented adverse effects and may safely be continued. Blood pressure and electrolytes (a blood test that checks salt levels and kidney function) should be monitored.

Midodrine is used in PoTS. There is limited information available from research studies about its use in pregnancy and breastfeeding. However, the information that does exist demonstrates no harmful effects on pregnancy or the development of the baby. However midodrine narrows blood vessels and there is a theoretical possibility that this could occur in the unborn baby too, causing potential problems. Therefore, midodrine, although considered to be low risk, should only be used if beta blockers and/ or fludrocortisone are unable to control symptoms effectively.

Ivabradine may be used as an alternative to beta blockers in PoTS. There is little available information on the safety of Ivabradine in pregnancy and, in studies of animals, some harmful effects were seen. Therefore ivabradine is currently not recommended for use during pregnancy and breastfeeding.

Octreotide and other similar medications (called somatostatin analogues). This group of medications have an unclear safety profile in pregnancy. There is information available through their use in other conditions in pregnancy such as in a few pregnant women with acromegaly (a medical condition where excessive growth hormone is produced). From these studies, use during pregnancy appears to be safe but further research is needed to confirm this. Their safety during breastfeeding is currently unknown.

Pyridostigmine is used to treat myasthenia gravis (a medical condition that causes weak muscles) in pregnancy and is felt to be safe in pregnancy and during breast feeding.

Clonidine has been used to treat high blood pressure and the information available on its use in pregnancy and breastfeeding does not indicate any worrying effects to either mother or baby.

Healthy Living

Remember that leading a healthy lifestyle will benefit your baby whether you have PoTS or not.

- Take folic acid supplements. Some women need vitamin D supplements
- Avoid drinking alcohol or taking recreational drugs
- Avoid undercooked meat, fish and eggs, unpasteurised milk, soft cheeses, unwashed fruit and vegetables
- Don't smoke

There is further information here:

<https://patient.info/health/diet-and-lifestyle-during-pregnancy>



During pregnancy

Most women with PoTS have a similar course in their pregnancy as women without PoTS in some surveys. About 60% of women with PoTS say their symptoms improve in pregnancy and up to 15 % say their symptoms stay the same. For some however, the symptoms of PoTS may worsen during early pregnancy, and this is especially true if you have hyperemesis gravidarum (excessive vomiting in pregnancy). Occasionally anti-vomiting medication or hospital admission for intravenous fluids is necessary. It is important to see your doctor if you experience worsening of your symptoms.

During pregnancy you will be referred to the hospital for your antenatal care and have the routine schedule of care and scans to monitor your baby. You may be referred to the anaesthetist to make a plan for any special considerations you may need during labour or delivery.

Considerations during pregnancy

- Keep as fit as possible with regular gentle exercise
- Drink plenty of fluids
- Pregnancy can be very tiring so make sure you take regular rest periods
- *Consider support/compression tights. Further information can be found here - <http://www.potsuk.org/compression>

Giving Birth

PoTS does not influence the type of delivery, and PoTS is not a contraindication to labour or a vaginal birth. The majority of women in recent studies have a normal delivery. A small number have a caesarean section; both methods of delivery are safe in PoTS.

Make sure that your obstetrics consultant and the anaesthetist know about your PoTS before your delivery. It may be helpful to print information about PoTS from the PoTS UK website.

After Delivery

Some women see an improvement in PoTS symptoms after childbirth, possibly due to the increased activity of looking after a child. Only a minority of people with PoTS find that their symptoms deteriorate after giving birth. It is important to see your doctor if your symptoms are worsening.

After your baby is born:

- *Get out of bed and move around as soon as you can after birth
- *Consider using compression stockings
- *Drink extra fluids when breast feeding
- *Pace your activities - there is always another day
- Plan ahead and accept help from family or friends if it is offered – and don't be afraid to ask.

Further information

<http://www.potsuk.org/>

<http://hypermobility.org/help-advice/pregnancy/>

<https://www.ehlers-danlos.org/information/pregnancy-birth-feeding-and-hypermobility-ehlers-danlos-syndrome-hypermobility-spectrum-disorders/>

Read Anita's Pregnancy diary here

<http://www.heartrhythmalliance.org/files/files/stars/For%20Patients/Anitas's%20story.pdf>



*This star sign indicates that there is currently no available medical evidence from research studies and the statement is based on patient experience or expert opinion.

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Updated: 1/12/2017
Review date: 1/12/2020
Version: 5

Details regarding the sources of evidence used in the production of this leaflet are available on the PoTS UK website. http://www.potsuk.org/sources_of_evidence