Main messages

PoTS most commonly affects women of child-bearing age and therefore pregnancy is an issue that affects many sufferers

PoTS is unfamiliar to many clinicians

Most women with PoTS will have a normal pregnancy and deliver a healthy baby with minimal complications

Pre-pregnancy counselling should be offered to all women to discuss in particular:

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

Medicines used for PoTS and pregnancy

Discuss treatments with your Dr before becoming pregnant

Don’t stop any medication suddenly

Take folic acid 0.4 mg for 3 months prior to conception and for the first 3 months of pregnancy

Adequate fluid and salt intake is very important - particularly if you have vomiting in early pregnancy

Beta Blockers

Labetalol is the first line drug used for high blood pressure in pregnancy and is regarded as safe in pregnancy and breast feeding

Propranolol has also been used for many years to treat many conditions in pregnancy and is also regarded as safe

Bisoprolol is a newer beta blocker for which there are fewer data

Fludrocortisone

Used for many years to treat Addison's disease

Safe

Monitor blood pressure and sodium levels

Midodrine (alpha 1 agonist)

Limited information demonstrates no harmful effects on pregnancy or the development of the baby.

However it is a vasoconstrictor (narrows blood vessels) and therefore potentially theoretically harmful in pregnancy. Eg. gastroschisis

Should only be used in pregnancy if nothing else controls symptoms

Ivabridine (sinus node blocker)

Even less information regarding use in human pregnancy

Harmful effects seen in animal studies

Avoid in pregnancy and breast feeding

Octreotide (only in refractory cases)

Very little experience

Has been used in acromegaly and other endocrine conditions

Avoid if possible

Pyridostigmine

Used to treat myasthenia gravid and safe in pregnancy and breast feeding

Clonidine (alpha 2 agonist)

Used to treat high blood pressure (similar to methyl dopa)

Safe in pregnancy and breast feeding

Will my PoTS symptoms worsen in pregnancy?

60% of women say their symptoms improve

15% say they stay the same

25% say they get worse

If they get worse:-

1/3 first trimester

1/3 > 24 weeks

1/3 throughout

Worseing likely related to physiological tachycardia and hypotension

Improvement later in pregnancy probably related to the physiological fluid retention

TOP TIPS

- **Management should be individualized and multidisciplinary**
- **Keep as fit as possible with regular gentle exercise / do not become deconditioned**
- **Drink plenty of fluids**
- **Increase salt intake**
- **Pregnancy can be very tiring so make sure you take regular rest**
- **Consider support/compression tights**

Effect of PoTS on pregnancy

No association between PoTS and an increase in adverse maternal outcome.

PoTS does not appear to increase the rate of:

- **miscarriage**
- **preterm delivery**
- **perinatal mortality**
- **stillbirth**

- **? Increased rate of nausea / vomiting / hyperemesis gravidarum**

Giving birth

Most women have vaginal deliveries and this is safer for baby and mother

Rate of vaginal deliveries in PoTS are the same as background

Epidurals can be used

Important to let the anaesthetist know about your PoTS before having a spinal for a caesarean section or an epidural for pain relief in labour

Resistance to local anaesthetics, which can be a feature in some women with joint hypermobility syndrome (EDS III), does not seem to be a problem when local anaesthetics are used for epidurals

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**

- **Majority of women with PoTS describe improvement, six months to one year after their pregnancy, compared to prior to pregnancy.**
- **Attributed to physical reconditioning**

SUMMARY

Women with mild or moderate PoTS have similar pregnancy outcomes to the general healthy population.

There appear to be no additional maternal or fetal risks conferred by PoTS.

Many of the drugs used to treat PoTS can be safely continued in pregnancy and breast feeding.

Therefore, women with PoTS can be encouraged to embark safely on pregnancy under multidisciplinary care.