



# Post-partum haemorrhage and Temporary Balloon Occlusion

This leaflet tells you about having a temporary balloon occlusion procedure. It explains why we do the procedure, what the procedure involves, what the expected outcome is, and any risk involved. This leaflet aims to help you understand the basic principles of temporary balloon occlusion, however if you have any further questions, please do not hesitate to ask your doctor for further explanation.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you for, or is performing, the procedure.

Sometimes, Temporary Balloon Occlusion is completed as an emergency due to excess blood loss, and your doctor may have given you this leaflet to help you understand what happened after it was done.

## What is a temporary balloon occlusion?

Temporary balloon occlusion is a minimally invasive method of reducing the amount of blood you may lose whilst delivering your baby. It involves using small needles and imaging guidance to pass wires along your arteries before inflating a balloon to temporarily reduce the blood flow. This aims to stop the bleeding and allow doctors to properly treat the bleeding point, with reduced risk of further bleeding.

## Why do I need temporary balloon occlusion?

Your doctor or midwife may have discussed with you that you may be at increased risk of post-partum haemorrhage (PPH). PPH is one of the most common complications associated with delivering a baby and is defined as more than 500mL of blood loss – roughly a pint. It requires urgent management to stop the bleeding and reduce your risk of becoming seriously unwell. Patients who experience PPH may feel lightheaded, short of breath, or your heart may beat faster than normal. Your doctor or midwife has recommended that you undergo temporary balloon occlusion as part of your Caesarean to help minimise these risks.

## How do I prepare for a temporary balloon occlusion?

Preparation for temporary balloon occlusion occurs before you undergo your caesarean, with the balloons placed in your blood vessels before your baby is delivered. Typically, you do not need to do any extra preparation for this procedure.

## How is temporary balloon occlusion performed?

Usually you will have been given treatment by the anaesthetic team in advance so that the lower half of your body is numb. A tiny nick is made in the skin at both sides of your groin and ultrasound guidance used to place small tubes in the arteries at both sides. The doctor will use X-rays to see the wire as it passes along your arteries and to place the balloons. Once the doctor is happy with the position, you will be taken for your Caesarean. If your obstetrician thinks that the amount of bleeding is becoming too much, they may then ask for these balloons to be inflated, to reduce the amount of blood loss.

## Who performs the procedure and where?

Usually, the procedure is performed by an interventional radiologist, who is a specially trained doctor in the use of wires, stents and balloons, for various procedures. The procedure may happen in a special x-ray room, or in the obstetric theatre where your caesarean is being performed.



### **What are the potential risks/complications of temporary balloon occlusion?**

Temporary balloon occlusion does have its own risks but is generally a safe procedure. Most commonly there can be some bruising and tenderness at the groin sites. Rarely infection can develop here. There is a risk of damaging the blood vessel wall or clot forming during the procedure. Usually, these complications are treated by the interventional radiologist at the time but may require open surgery if there is a significant injury such as the leg not getting enough blood supply. This is a rare complication; however, it is important to be aware of this.

### **What happens afterwards?**

After the balloons are inflated usually a further procedure will be done to stop the bleeding completely. This will vary depending on the cause of your bleeding, and this can be discussed with your doctor or midwife.

Once the bleeding is controlled, the balloons will be deflated and removed through the original puncture sites. To reduce the amount of bleeding from the puncture site, the doctor will press down and apply pressure here, and sometimes may use a device to help close the artery to reduce the bleeding further. The sites at the groin will be monitored along with your blood pressure and other vital signs to identify any complications.

Notes