Intra-aortic Balloon Pump (IABP)

For patients of the TGH Coronary Intensive Unit and their families

Read this information to learn:

• how your heart works
• how an IABP can help your heart
• what you can expect
• what you need to remember when using an IABP
How does my heart work?

Your heart is a muscle. It is always pumping blood carrying oxygen and nutrients (food) to every part of your body.

The inside of your heart is divided into 4 chambers (areas). There are 2 on the right side and 2 on the left side:

- The right side of your heart receives blood that has already delivered oxygen and nutrients to your body. This blood is pumped from your heart to your lungs, where it picks up a fresh supply of oxygen.

- The blood then returns from the lungs to the left side of your heart. From here, it’s pumped through your main artery (aorta) to all the smaller arteries in your body.

Your heart needs its own steady supply of oxygen and nutrients. Your **coronary arteries** are the blood vessels that bring these nutrients to your heart.
How can an Intra-aortic balloon pump (IABP) help my heart do its work?

When your heart doesn’t get enough oxygen and nutrients because of blocked coronary arteries or other medical problems, it has to work harder. In some cases, it may not be able to work well enough to supply your body with the oxygen and nutrients it needs. When this happens:

• you may feel short of breath
• you may have pain in your chest
• your blood pressure may drop

If you have any of these symptoms, an intra-aortic balloon pump (IABP) can help your heart work better. An IABP uses a special catheter (tube) and machine to help your heart pump blood to the rest of your body. A specially trained doctor puts the IABP into your aorta, near your heart.

Remember: An IABP doesn’t take over for your heart. It just helps it do its work.
What can I expect when getting an IABP?

1. We ask you to lie on your back in a bed.
2. Your doctor injects medicine into an area on your groin (the area where your leg and hip join). The medicine numbs this area of your body where the catheter (tube) will go in.
3. Your doctor puts a catheter into the large artery in your groin.
4. Then they put an IABP catheter through this same artery and place it into your aorta near your heart.

5. The catheter on the outside of your body ends just above your knee. It is connected to a special machine called the balloon pump.
6. We stitch the catheter in place while your groin is still numb and put a large dressing over the area.
What happens after the IABP is put in?

- You have an x-ray after the procedure and every day while the IABP is in your heart. This makes sure the catheter is in the right place.

- Your nurse checks you very closely. As part of your care, your nurse checks:
  - the pulses in your leg closest to the IABP
  - the catheter area in your groin
  - the balloon pump machine
  - your blood pressure and pulse every hour

- You will hear different alarms and sounds coming from the machine. Don’t worry. This is a part of the IABP working.

- Every 2 hours the IABP will stop pumping for a short time to reset. Don’t worry. Your heart will keep pumping.

**Remember:** The IABP isn’t doing all the work for your heart. It’s just helping.

- We give you a medicine called a **blood thinner**. This medicine reduces the chance that blood clots will form on the IABP catheter.

What do I need to remember while I’m using the IABP?

- Don’t get out of bed. You need to stay in bed at all times while the catheter is in your groin.

- Don’t sit up. If you would like your head raised a little, we can raise the head of your bed up to a 30 degree angle. Ask your nurse to show you how high you can raise your head.

- Don’t bend the leg closest to the IABP catheter. This can cause it to stop working or cause you to bleed from your groin.
Tell your nurse or doctor right away if you:

- have any chest pain or feeling of heaviness in your chest
- have any pain, numbness, or tingling in your leg closest to the IABP catheter
- are bleeding

Try to stay calm while you are using the IABP.
If you have any questions about your care, talk to your nurse or doctor.

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