

Transversus Abdominis Plane (TAP) and Quadratus Lumborum (QLB) Blocks for Surgery

This handout explains what a transversus abdominis plane (TAP) and quadratus lumborum (QL) block is and when it is used.

Both blocks are used to numb the nerves on the front of the stomach. An ultrasound machine is used to guide the numbing medicine into the right place. For a TAP block, the medicine is placed into the layers of muscle in your stomach. For a QL block, the numbing medicine is placed more toward your back. This may increase the area of your stomach that is covered and give added pain relief.

How long will the pain relief last?

In both cases you can get a single shot or have a nerve catheter placed. If you have a single shot, the needle is taken out after the medicine is given.

Pain relief for a single shot TAP block should last for 12-24 hours. Pain relief for a single shot QL block should last for 8-18 hours. If you have a catheter, a very small tube is left in place. The tube gives you a constant dose of numbing medicine until it is taken out.

When is a TAP or QL block done?

A TAP or QL block can be done for patients having surgery that involves the stomach wall. The TAP block is most often used with a hysterectomy, hernia repair, or kidney surgery. QL blocks are most often used with bowel, prostate, and OB/GYN surgeries. If a patient is not able to have an epidural, a TAP or QL block may be an option. While it depends on the length and type of surgery, both blocks can be done before or after surgery. Your anesthesia doctor will talk about the pros and risks of each block with you.

Is the pain control as good as an epidural?

A TAP or QL block tends to be a one-time shot and a catheter is not placed. The block starts to wear off after 12-18 hours. With an epidural, the numbing medicine and pain control continues for as long as the catheter is left in. This is due to the constant dose of medicine through a catheter. The numbness from a TAP or QL block may not be as dense or complete as the numbness from an epidural.

What are the pros of TAP and QL blocks?

Both blocks use a shot of medicine to numb around your nerves and help with pain control. Using numbing agents may help to decrease the amount of opioid pain medicines needed to treat your pain after surgery. Unlike epidurals, these blocks should not cause your muscles to be weak. They also should not stop you from walking after surgery or lower blood pressure. Patients who cannot have epidurals because they take blood thinning medicines or have a bleeding disorder may be able to have a TAP or QL block placed.

What are the risks of TAP and QL blocks?

While TAP and QL blocks are very safe, slight risks include:

- Bleeding
- Infection

In rare cases:

- Numbing medicine could accidentally go into a blood vessel during a TAP block. This could have serious effects on your heart.
- The needle used for the TAP block could puncture an abdominal organ.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2018 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7297.