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

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

TAP or QL Block
A TAP or QL block may be an option if you cannot have an epidural. Both blocks can be done before or after surgery. It depends on the length and type of surgery. Your doctor will talk to you about the benefits and risks.

Types of Procedures
The **TAP** block is most often used with:

- A hysterectomy
- Hernia repair
- Kidney surgery

QL blocks are most often used with:

- Bowel surgery
- Prostate surgery
- OB/GYN surgery

How It Works
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.

Pain Relief
Pain relief depends on the type of numbing medicine used to do the block and if a catheter is left in place. 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.

- Pain relief for a single shot TAP block, with short-acting medicine, should last for 12-24 hours.
- Pain relief for a single shot QL block, with short-acting medicine, should last for 8-18 hours.
- Pain relief from longer acting liposomal medicine, can last 72-96 hours.

Your care team will help decide which option is right for you.

Pain Control
A TAP or QL block is a one-time shot. A catheter is not placed. The block starts to wear off after 12-96 hours, depending on the type of medicine used.

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.

Benefits
Both blocks use a shot of medicine to numb around your nerves and help with pain control. Using numbing agents may help to lower the amount of opioid pain medicines needed to treat 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 patients who have a bleeding disorder may be able to have a TAP or QL block placed.

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

- Bleeding
- Infection

In rare cases:

- Numbing medicine could go into a blood vessel by accident 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 © 2/2025 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7297.