

What is a TAP Block?

The Transversus Abdominis Plane (TAP) block is a technique where local anesthetic is injected into a potential space between the internal oblique and transversus abdominus muscles. This plane contains the nerves that provide sensation to the anterolateral abdominal wall, approximately T10-L1.

What is it used for?

The TAP Block is typically used for pain control after lower abdominal surgery including bowel, prostate, obstetric and gynecological surgery. It may be performed either preoperatively or postoperatively.

What are the benefits?

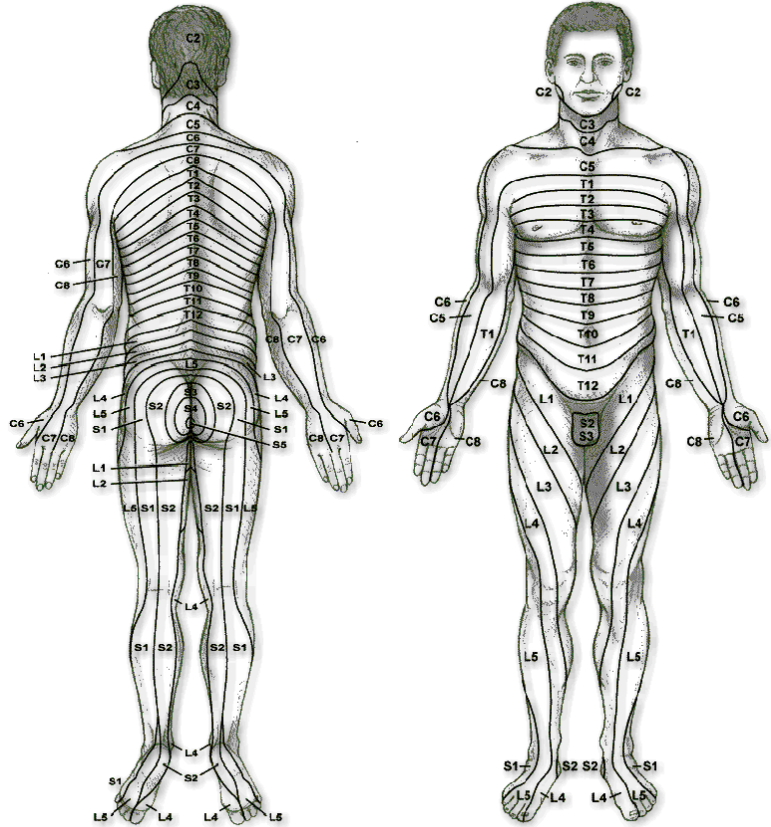
In several randomized control studies, TAP blocks showed a significant decrease in postoperative pain scores, as well as a 50-70% reduction in postoperative opioid requirements. TAP blocks do not cause motor block, so patients are able to ambulate without difficulty. In addition, because the local anesthetic is not injected centrally, there is no effect on blood pressure.

Why would you perform a TAP block instead of an epidural?

The TAP block has fewer risks than an epidural because you are not injecting into the epidural space. It is also a possible alternative for patients who have contraindications for an epidural (coagulation abnormalities, prior spine surgery, etc.), and for patients who require short-term pain relief such as outpatient surgery.

How is a TAP Block performed?

The patient is placed in the supine position. Using ultrasound guidance, a needle is inserted until it reaches the plane between the internal oblique and transversus abdominus muscles. Once correct placement is confirmed, 20 ml of local anesthetic is injected. The TAP block may be performed on both sides of the abdomen for bilateral coverage. In addition, catheters may be placed to prolong analgesia.



What are the potential complications?

Most complications reported have been with blind placement of TAP Blocks. Potential complications include intraperitoneal injection, bowel hematoma, transient femoral nerve palsy, liver laceration and local anesthetic toxicity.

What do I need to know when caring for a patient after a TAP Block?

- If surgery enters the peritoneal cavity, the dull visceral pain from spasm and/or inflammation may still be present.
- In some patients, the TAP block may spread farther up or down than T10-L1.
- Depending on the type of local anesthetic used, a TAP Block typically lasts 12-36 hours.
- The TAP block can produce relaxation of the abdominal wall muscles, which can result in a “flank bulge”, which may look like a hernia. This may be more pronounced in patients with low Body Mass Index (BMI).
- Any patient with significant abdominal distention following a TAP Block should be assessed for possible internal bleeding.
- If catheters are placed, it is not uncommon to see a small amount of drainage under the dressing. If the dressing is no longer secure, or the patient is no longer receiving pain relief, contact the Anesthesia Acute Pain Service.

References

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