



ACUPUNCTURE & ACUPRESSURE

Musculus Luculentus Acuspunctura: The Transversus Abdominis (Pt. 2)

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Editor's Note: Pt. 1 of this two-part article appeared in the [April 2024](#) issue.

TrA-2, my primary needle location, I needle 95% of the time and I think it works the best. You'll know you have the right point location when you discover the muscle twitching when applying electric stimulation.

Heads up: This area is a little creepy to needle because it's the deepest abdominal muscle and right underneath it is the liver. If you're too nervous, then needle the most caudal point, TrA-3, the one under the iliac crest. This is a good alternative; you can pretty much hit the muscle at its origin (anterior two-thirds of the iliac crest), plus it's near some of the nerves that innervate the muscle. Throw in a distal needle to boot, such as TCM points on the GB and/or LR channels and/or the two I provide below.

Patient Positioning

Patient is supine or side-lying. Supine would work well for TrA-1, the one point I don't like to use. I recommend a side-lying position for the other two. With the patient in a side-lying position, the contents of the peritoneal cavity move medially, which facilitates safe needling.

Needling Directions

Use a 0.25 to 0.30 mm × 30-40 mm needle. It depends on tissue mass.

Needling directions for TrA-2: Perpendicular needle insertion; avoid going deeper than the muscle's depth. With the patient lying on side, needle perpendicular just above GB 26 and level with GB 25. Use electric stimulation.

Needling directions for TrA-3: Oblique needle insertion; avoid going deeper than the muscle's depth. With the patient in side-lying position, needle tangentially under the iliac crest between the ASIS and the highest point of the crest, caudally toward the ischium. Use electric stimulation.

Precautions: The peritoneal cavity lies deep to the abdominal musculature where the liver resides, and care is required to ensure correct needle depth.

If this abdominal needling makes you nervous (believe me, I get it), here are some distal points that might help activate the TrA using electric stimulation: *Huatuojiaji* points along T7-T12 and especially L1. Another point location is 3 cun above GB 27 on the ASIS, on an oblique angle along the bone. The third location is to needle along the Iliac crest just below GB 26 (free end of 11th rib). Here again is a transverse insertion along the crest.

Additional Information About the Transversus Abdominus

Innervating nerves and supplying arteries of the TrA: It's innervated by the ventral rami of thoracic nerves T7-T12, lower five intercostal nerves, subcostal nerve, ilioinguinal and iliohypogastric nerves from L1.³ The TrA receives its blood supply from the lower posterior intercostal and subcostal arteries, superior and inferior epigastric arteries, superficial and deep circumflex iliac arteries, posterior lumbar arteries.¹

Myofascial TrP pain: Pain is experienced across the upper abdomen, with a focus on the xiphoid process.³ Patients can also experience a marked enthesitis along the inferior costal margin.³ The suprapubic attachment refers pain inferiorly and medially. If there is a trigger point, the patient may present with distressing and painful cough.^{1,3} The TrPs of the TrA are usually found along the ribs and the anterior Iliac crest.

In concert with other core muscles, the TrA supports lumbopelvic coordination during movement and its unilateral action is ipsilateral trunk rotation.¹

Palpation of the TrA: The patient is in crook lying position (supine with knees bent and feet flat on the table); find the ASIS and move two inches toward the midline, then one inch inferior, and apply light pressure. When the muscle is contracted, you will feel muscle tension popping under your finger.¹

Activation exercises: Drawing-in technique is the most effective technique to activate and strengthen the TrA.^{1,5} Here's is some excellent instruction of the basic draw-in maneuver courtesy of Physiopedia:

Lay on your back, with knees bent and feet flat on the floor in crook position. Place your fingers on the muscles just below your belly button, then contract those muscles by pulling them down and away from your fingers (i.e., pull the belly button down toward the floor without holding your breath during this movement). Keep your upper abdominal muscles, back muscles, and hip muscles relaxed. Hold this position for five seconds, making sure you continue to breathe.

The point of this direct transverse abdominis exercise is to fire the transverse abdominis without firing the rectus abdominis muscle.¹ The exercise should be graduated from maintaining static contraction to more dynamic and functional activities and application with other core exercises.¹ (Check out this awesome video demonstration by Dr Deborah Riczo:

<https://www.youtube.com/watch?v=MGvQNzhxBWo>.) Other exercises we use at my clinic are dead bugs and quadruped progressions / bird dogs.

Author's Note: I hope you liked my first contribution to the *Musculus Luculentus Acupuncture* series. Stay tuned: I'll be nerding out on more muscles soon to come. Check out my references, especially #6; the full text is available via an online search of the title. Also feel free to reach out to me at acusport555@gmail.com if you have any questions or just want to nerd out.

References (both parts)

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