

On Pins and Needles

Navigating the risks of acupuncture

IT WAS A STORY THAT SENT CHILLS THROUGH ANYONE WHO HAS EVER ADMINISTERED AN ACUPUNCTURE TREATMENT TO A PATIENT.

Canadian Olympian, Kim Ribble-Orr, still feels the effects of a punctured lung, the result of an acupuncture needle inserted by her massage therapist. Her story was published in the National Post in an article entitled “Canadian Olympian’s ‘nightmare’ after acupuncture needle collapses her lung” written by Tom Blackwell (the article can be read in full at: <http://news.nationalpost.com/2013/07/04/judo-acupuncture-needle/>).

Given that many physiotherapists use needling as part of their treatment routine, the precedent is worrying. How can the practice be implemented without risk to the patient or the professional administering the needles?

Employing safety mechanisms

Many of the precautions around needling are rooted in common sense. As with any therapeutic technique, it’s important to know what you’re doing when needles are involved. Make sure you’re comfortable and confident with any equipment before you use it, and with the part of the body you’re looking to treat, says Heather MacKay, chair of CPA’s Acupuncture Division and a physiotherapist working in Caledonia, Ontario.

“If you don’t know the anatomy you are needling, don’t needle it—plain and simple!” MacKay says.

Before treatment begins, don’t pre-peel or open the packaging in advance of the patient’s appointment. “Each treatment should have sterile needles, and you can only ensure this is the case when you peel the needles during a patient visit,” she says.

It’s also important to count and monitor the number of needles used, and relay that information to the patient, too. Good patient communication is crucial to a successful needling experience.

“We count and recount the needles, tell the patient how many are inserted and point out any hidden needles,” says MacKay. “Then we record the number on a whiteboard outside the treatment room, so that when the therapist removes the needles, the numbers match up with the original count.”

It’s also good protocol to provide the patient with a bell or other signifier device while the needles are in. Encourage the patient to ring the bell if they need assistance, or experience any discomfort.

“Our clinic policy is that if the bell is rung, all staff must immediately respond,” says MacKay. “There is no assuming that someone else is responding to the sound.”



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Heather MacKay,
chair of CPA's
Acupuncture
Division

While acupuncture can be used on most patients, there are special considerations for certain conditions and specific acupuncture points. Heather MacKay, chair of CPA's Acupuncture Division shares these tips.



PHOTO: Shawn Phillips

Conditional Advice

- Be aware of thin frames. Remember that palpation is a must, and don't needle too deep; KNOW YOUR ANATOMY.
- Avoid needling patients who are in the first trimester of pregnancy, and use caution for specific point locations in other trimesters. For example, GB 21, LI 4, SP 6, BL 31-34 and avoid abdominal insertions and auricular endocrine points all together. Acupuncture has not been documented or proven to cause problems with pregnancy but due to the high incidence of spontaneous miscarriage in the first trimester it is a medico-legal consideration. Use caution when needling those with hemophilia as it may enhance hazards of bleeding. Only experienced practitioners should consider this type of patient and can always consider other alternatives such as laser therapy over acupuncture points. Research does support the use of acupuncture with hemophilic related pain.
- Acupuncture can lower blood sugar levels post treatment, so patients who have not eaten or who are diabetics need to be monitored.
- Be aware of high-risk areas of injury when needling. 1) the vertebral artery (GB20); 2) the pleura (GB 21, LU 1, LU2, TH 15, KI 27 and thoracic T8-T10 areas where the paravertebral musculature is thinner). 3) The carotid artery (when needling the cervical spine we want to stay posterior to the transverse processes) 4) CV 17 with deep insertion can cause a cardiac tamponade; make sure needling is in an oblique threading insertion. 5) Jugular vein / Carotid Artery (LI 18 avoid deep needling)
- Use precautions while needling around arteries: Vertebral Artery (GB 20); Carotid artery (cervical facet points, LI 18); External Iliac Artery and Femoral Artery (SP 12); Popliteal Artery (BL 40); Posterior Tibial Artery (KI3); Brachial Artery (PC 3)
- Avoid needling into post-op joints and acute tissue due to risk of infection and further irritation of acute tissue. Think about using axial points targeting the autonomic and somatic levels of a joint and SP 6, SPS 9 for swelling.
- Use caution when using needles on those taking anti-coagulants due to risk of extensive bruising and poor clotting.
- Use caution on those with heart valves repairs as there is an increased risk for potential infection / endocarditis; consult with treating physician as prophylactic antibiotics may be given.
- Do not use electrical acupuncture stimulation on patients who have pacemakers or electrical implants as it may interfere with the equipment.
- Immuno-compromised patients should be needled with caution as there is a potential for infection and bleeding which may be difficult for their compromised systems.
- Communicate with oncologists when treating cancer patients. Acupuncture has been shown to perfuse and stimulate an area which may be contra indicated with oncology patients. Be aware of red flags for those undiagnosed as acupuncture may "mask" pain associated with cancer.

Finally, be aware of vasovagal responses. Pay attention to positioning of the needles, be aware of regions highly susceptible to causing a vasovagal response such as the neck, shoulder, glenohumeral joint and think about supported positioning to decrease this potential response, says MacKay. If someone experiences a vasovagal response, remove the needles, position them supine, monitor their pulse, provide glucose (fruit juice) and potentially needle or at least provide acupressure to GV 26 as it is a sympathetic regulator.

“Don’t force a needle past depth resistance,” she says. “You need to be aware of the depth of insertion in relation to the structures below it.”

Managing the risk

In spite of preparation, precautions and best intentions, there is inherent risk involved in using needles on patients. Across Canada, pneumothorax injuries as a result of needling treatments are becoming more frequent, and that should worry physiotherapists, says Sharon Dawson, a claims adjuster with Maltman Group International, the insurance adjuster for CPA’s professional liability insurance program.

Given these statistics, it’s critical that physiotherapists protect themselves as best they can in the event of a needling claim. That means doing due diligence like obtaining proper patient consent up front, charting accurately and keeping all necessary records, says Dawson.

“Supporting documentation is key,” says Dawson. “A consent form, signed by the patient, with the signature witnessed and the form dated, is an integral part of a defense.”

Be sure to include a broad range of information in the chart history, including details on the patient’s health condition at the time of treatment, and if treatment was modified as a result. Don’t forget to list things like medications the patient may be taking, or other therapies he or she is concurrently undergoing, adds Dawson.

Well-documented, charted notes are crucial in each and every case. If a claim is brought against you, those charts will be summoned. “We will look at the type of procedure performed, the type and size of needles used, the number of treatments and if an improvement was noted by the patient following the first treatment,” says Dawson. “We also need to know if there was something different about the way the treatment in question was performed, and if the physiotherapist has any acupuncture certification or is involved in continuing-education programs related to the practice.”

Dawson adds that investigators also look at how the patient relays the experience, and whether or not he or she complained of immediate discomfort following a treatment, and what procedures were in place to deal with such complaints. If the case involves a punctured lung, external details on hospital treatment and discharge specifics might also be required.

Be prepared to wait for a resolution in the claim case as well, says Dawson. “The litigation process can be long and drawn out, despite the fact that in most cases, a pneumothorax injury resolves itself in a matter of weeks with no long-term impact,” she says.

Checklist for protection

While the risks remain, the value of needling treatment is still high, so there’s no need to steer clear altogether. The CPA recently launched a resource designed to help physiotherapists use needles safely and protect themselves at the same time.

The CPA checklist tool provides a straight-forward set of procedural steps for a therapist or clinic to follow. Its intention is to standardize safety protocols across the profession, and promote structure to avoid error in usage.

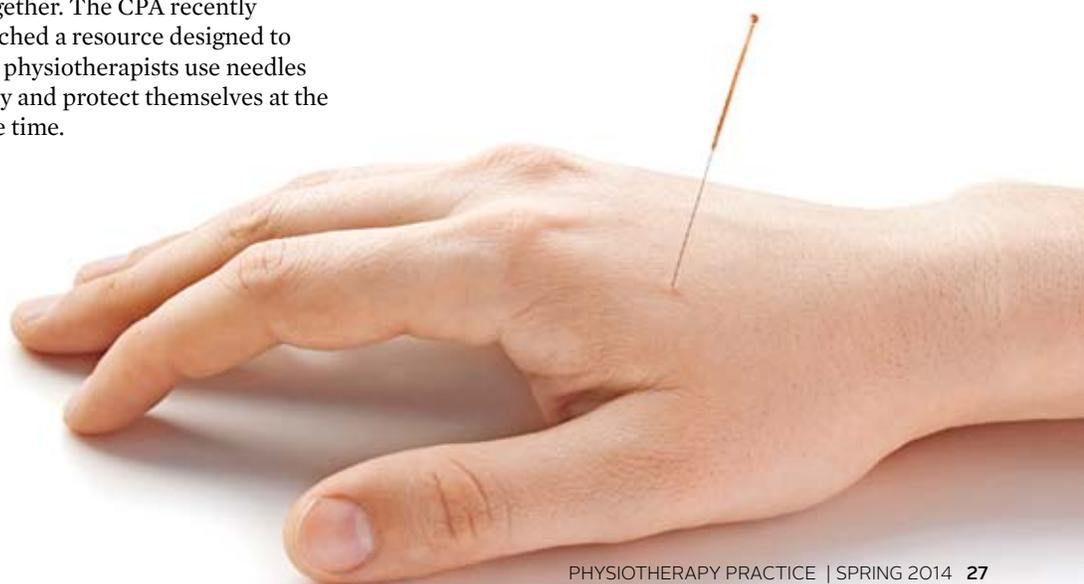
“The checklist prevents missing steps and promotes clarity, with the idea of minimizing potential mistakes,” says MacKay.

However, the checklist isn’t designed to supplant the decision-making of trained professionals. As with any situation when risk is involved, the best protection for you and your patient in needling treatments is safe application, a careful approach and appropriate documentation.

For more on CPA’s Acupuncture Division, visit physiotherapy.ca/divisions/Acupuncture

Visit the Risk Management section of CPA’s website to download the needling checklist at <http://physiotherapy.ca/Practice-Resources/Resources>

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Your questions about the association's protection answered

CPA Resources for Safe Needling

The rate of serious complications related to needling in physiotherapy practice is low, but the consequences can be serious. Although needling claims are not common in the CPA liability policy, CPA offers education about the risks associated with needling through written materials and practical resources.

Does CPA's insurance program cover needling? How can I determine which coverage is best if I am practising needling?

CPA's professional liability insurance program is designed to provide coverage within your full scope of practice as a physiotherapist. Needling is within the scope of practice of physiotherapy, so it is covered by the CPA insurance program. If you are a registered acupuncturist, your needling falls outside of the scope of practice of physiotherapy and it is recommended that you protect yourself and your patients by purchasing an acupuncturist rider on your insurance policy. For more information, please contact a CPA insurance program representative at BMS Group, cpa.insurance@bmsgroup.com.

Are needling claims on the rise? Are the claims similar in terms of reasons or conditions?

Nothing in CPA's professional liability claims data suggests there has been a recent increase in claims related to needling. In fact, the most common claims to the CPA program don't even involve physical injury; instead they're based on patient or public complaints to the physiotherapy regulatory Colleges. These complaints include things like inappropriate or insensitive comments, biased or discriminatory treatment, and unprofessional business practices.

What can PTs do to protect themselves and their patients from incidents related to needling?

There are a number of things PTs can do to mitigate the risk of a claim related to needling. These include:

- practising in accordance with local regulations
- complying with the practice standards set by their College
- establishing that the patient was an appropriate candidate for treatment
- documenting the informed consent conversation and details of treatment, including the patient's response
- demonstrating that the patient was monitored appropriately during treatment
- documenting that the appropriate post-treatment information was provided to the patient

These safe practice items have been captured in a new resource available exclusively to CPA members. CPA's *Needling Safety Checklist* was developed in consultation with content experts from across Canada and trialled by CPA members in the clinical setting. We recommend that you access this resource and implement it into your practice to improve consistency of care and support quality clinical practice, which can have a positive impact on patient safety. Download the *Checklist* at: physiotherapy.ca

If the patient has needling treatment at every visit, does the PT have to do the Checklist each time?

The *Checklist* is designed as an easy to use, practical tool to improve consistency of care and reduce complications associated with needling. In fact, CPA encourages adaptation of the *Checklist* so that it fits your local environment and also maintains some of the core elements.

You can implement the *Checklist* in a manner that best suits your practice environment. For instance, you can complete the *Checklist* with every patient at every treatment session involving needling; complete the *Checklist* with every patient upon the first treatment session involving needling; or use the *Checklist* as a visual aid by posting it (or otherwise making it available) in an appropriate location in your facility. The *Checklist* can also be added to your patient's chart to support documentation of safe patient care.

To make best use of the tool and to facilitate patient safety, the *Checklist* should be completed with every patient and at every treatment session. In this manner it facilitates patient safety by ensuring that all processes related to needling safety are executed with each patient, every time. One idea is to laminate the *Checklist* to make it available for use with each patient – but this also makes it re-useable. That way it won't add volumes of paper to the patient chart and it still gets completed each session.