Protecting Your Wrists in Veterinary Practice

Guard your hands and wrists from overuse and awkward postures within the veterinary setting.

Saleema Lookman, RVT, CPT

Aristotle stated, “The hand is the tool of tools,” and a veterinary nurse’s hands are precious tools within the veterinary practice. From gripping instruments to restraining patients and from performing venipuncture to typing medical records, our hands undergo continuous stress. Overuse injuries of the hands and wrists can contribute to chronic discomfort, which can impact your life both in and out of the hospital. However, simple modifications to daily tasks as well as intentional stretching and strengthening movements may serve as an effective way to prevent injury.

WHY DO MY WRISTS HURT?
Wrist and hand pain can result from various sources, including acute sprains, soft tissue cysts, tendonitis, nerve compression, and fracture. However, it’s possible that pain could be a result of overuse or awkward postures, which are common in the veterinary practice. The AVMA veterinary ergonomic guidelines include extended periods of wrist angles over 30° as a risk factor for musculoskeletal injury. Veterinary nursing tasks that can result in awkward positioning of the wrists and hands include dental prophylaxis, grooming, animal handling, cleaning, suturing, and computer work, among many others. Unfortunately, similar prolonged postures have been linked with twice the risk of developing carpal tunnel syndrome, as they contribute to increased pressure on the median nerve. Sometimes referred to as “Blackberry thumb,” de Quervain’s tenosynovitis is a hand condition characterized by pain and swelling near the base of the thumb. It was long believed this syndrome was caused by repeated strain on the wrist or thumbs, such as using one’s phone, as the name suggests. Duties performed by veterinary nurses may put similar strain on the tendons of the thumb. While experts now suggest that there is no direct relationship between occupational factors and de Quervain’s syndrome, it is possible that repetitive motions could exacerbate symptoms.

STRENGTH TRAINING EXERCISE
With so much time spent in a gripped position through daily tasks, it is important to strengthen the opposing muscles to address possible imbalance. The use of an ordinary rubber band can provide resistance to facilitate this movement.

Benefits of Intentional Movement
The “Movement Is Medicine” series will focus on common areas of discomfort for veterinary nurses in the workplace. Although this series will primarily discuss how intentional movement can protect your body on the job, it’s important to note that physical activity can also boost mood, elevate confidence, improve focus, increase energy, reduce stress, and improve quality of life.

Adults should engage in at least 150 minutes of moderate-intensity aerobic activity plus 2 days of strength training each week. This might feel like an inconvenience—the last thing on your mind after a long shift—but think of it as an exercise prescription. You would want your clients to comply with prescribed recommendations, so aim to hold yourself accountable for 30- to 45-minute sessions 5 times each week. The key to adding fitness to your routine is to discover a modality of movement that you enjoy.
Be sure to confirm with a healthcare professional that these exercises are appropriate for you before attempting them and seek medical attention should you experience pain or discomfort during execution.

**Finger Extension With Rubber Band**
- Place a rubber band around the tips of all 5 fingers of one hand.
- Working against the resistance of the band, spread your fingers to open your hand.
- Once your fingers are extended to your range of motion, pause for 2 to 3 seconds.
- Slowly return to the starting position.
- Complete 10 to 15 repetitions then repeat on the other hand.

**Regression**: Reduce your range of motion.
**Progression**: Increase the resistance of the rubber band.

**WRIST FLEXORS STRETCH (B)**
- Slightly bend your elbow while you complete the movement for a regression option.

**Wrist Extensors Stretch**
- Extend your arm in front of you with the palm facing down.
- Gently bend your wrist, guiding your fingers downward and toward you using the opposite hand.
- Hold for 20 to 30 seconds then repeat on the other side. Complete 2 to 3 times each.

**Regression**: Bend your elbow slightly during the stretch.

**Palm Press Stretch**
- Bring your palms together in front of you with fingers pointing upward.
- Press your hands against each other and guide them close to your chest.
- Gently bring your hands downward, feeling a stretch in your forearms.
- Hold for 10 seconds. Complete 2 to 3 times.

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**STRETCHING MOVEMENTS**
Improved wrist mobility can contribute to injury prevention. Perform these stretching movements every day before beginning your shift or as needed while completing work tasks. Discontinue immediately if you feel pain at any point while performing these stretches.

**Wrist Flexors Stretch**
- Extend your arm in front of you with the palm facing up.

**Wrist Extensors Stretch**
- Extend your arm in front of you with the palm facing down.
- Gently bend your wrist, guiding your fingers downward and toward you using the opposite hand.
- Hold for 20 to 30 seconds then repeat on the other side. Complete 2 to 3 times each.

**Regression**: Slightly bend your elbow as you complete the movement.
SPECIAL CONSIDERATIONS IN THE VETERINARY PRACTICE
While strengthening and stretching can help prevent injuries, some tasks that leave your wrists and hands vulnerable to harm are unavoidable in the veterinary setting. Aim to implement these intentional changes while on the job to protect yourself.

● Avoid scruffing cats. Many veterinary nurses and entire practices have chosen to replace manual or clip scruffing with gentler forms of restraint whenever possible. Not only do many cats respond negatively to these tight gripping methods, but the posture can negatively impact you, as sustained gripping is a suggested risk factor in the development of carpal tunnel syndrome.⁸⁻⁹ Instead, the use of towel wraps or chemical restraint may be more appropriate alternatives.¹⁰

● Use keyboard wrist rests. While sitting at a computer, your wrists should remain in a neutral position in line with the forearms.¹¹ The use of wrist supports to elevate the wrists and/or arms can help achieve this desired posture. Practices can install ergonomic keyboards or cushioned rests at shared computers throughout the hospital. In a pinch, a rolled towel will accomplish the same effect.

● Take frequent breaks. If you are completing a task involving gripping or awkward wrist angles (e.g., dental prophylaxis) for extended periods of time, it’s critical to take frequent breaks. If possible, alternate with a partner to give your hands a rest or pause to perform wrist flexor and extensor stretches before continuing ongoing tasks.

HANDY TIPS TO PROTECT YOUR HANDS AND WRISTS
Whether you’re in the hospital setting or at home, you rely heavily on the use of your hands. A wrist injury can cause long-term discomfort. Take precautions to protect your hands and wrists from overuse and awkward postures within the veterinary workplace to improve your quality of life. With these tips, you can continue your daily activities pain-free.

References

Saleema Lookman
Since entering the veterinary field in 2009, Saleema has held a variety of roles and positions. This diverse experience led to the discovery of her true passions for patient care, education, and mentoring. Saleema is currently part of the Boehringer Ingelheim Tech Champion team, delivering continuing education presentations to veterinary nurses. Saleema lives out her passion for fitness as a certified personal fitness trainer and group fitness instructor.