

## The Pricking of My Thumbs

By Susan Camp

When one of the witches in Shakespeare's *Macbeth* proclaims to her sisters, "By the pricking of my thumbs, Something wicked this way comes," she isn't referring to the something wicked that results from hours of repetitive chopping, hoeing, and raking in the garden after a winter spent in more sedentary pursuits.

My thumbs and fingers have been pricking and tingling this past week, from one of several possible reasons, none of them involving Macbeth and his equally wicked lady. Some of you may have felt the same discomfort after spending hours trying to clean up the garden after this harsh winter. Two common disorders can result from or become exacerbated by poorly designed tools and incorrect hand positioning.

Tingling, pain, and numbness of fingers, hands, and wrists can occur as a result of repetitive movements, potentially leading to carpal tunnel syndrome (CTS). CTS occurs when the lining of the carpal tunnel, a narrow area at the base of the wrist, and the flexor tendons that allow the fingers to close become swollen and inflamed from repetitive movements or vibration. The medial nerve, which transmits nerve impulses down the arm to the thumb, first two fingers, and half of the ring finger, becomes trapped and irritated. If you suspect that you suffer from CTS, you will need to see a specialist for diagnosis and treatment options, but you can take steps to reduce discomfort and the likelihood of developing this disorder.

Osteoarthritis occurs as the cartilage that cushions and keeps the ends of bones from rubbing against each other breaks down from wear and tear. Joint pain and stiffness result, with joint deformity appearing over time. Osteoarthritis can develop in any joint. Finger joints frequently are affected. You may notice increasing stiffness and discomfort in some joints as you grow older.

Gardening is a delightful pastime, providing hours of pleasure and stress relief, so what are some actions you can take to decrease pain and injury? Know your limitations. If you have been inactive during the winter, start slowly. Take a 15 minute rest break every hour. Change activities so you don't overuse one set of muscles and joints. Keep your tools clean and sharp to minimize the effort of using them. Drink plenty of water.

Use the right tools to supplement the suggestions listed above. Are you still using a 50-year-old leaf rake or a garden trowel inherited from your grandmother? If so, it is time to hang Grandma's garden tools on the potting shed door as decorative items and look at new, ergonomically designed hand tools. Ergonomics is the applied science of developing and adapting tools to provide maximum safety and efficiency for the user. For gardening tools, that means implements that allow the hand and wrist to remain in a relaxed or neutral position, encouraging maximum strength with minimum effort.

Ergonomically designed gardening tools are available from garden centers, hardware stores, and online. Many tools come in a variety of sizes. If possible, try items out before buying. Using tools that are too large for your hand will place excess stress on muscles and joints. Ergonomic tool features include large diameter, curved handles in a variety of lengths with textured, padded grips to maintain the wrist in neutral position. If you can't find the handle that fits your hand, you can experiment with tape, bicycle handle grips, or foam pipe insulation to create the exact grip you need.

Virginia Cooperative Extension (VCE) Publications 426-060 and 426-062 provide more detailed information on carpal tunnel syndrome and osteoarthritis, respectively. The University of Missouri Extension "Life Times" Vol. 9, No. 4 offers suggestions for selecting and modifying tools.

Play it safe this spring and try out some new tools. There is too much to do in the garden. You don't want to be slowed down by the pricking of your thumbs.

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