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Local basketball star gets back in the game with an assist from occupational therapy



Cathy Wade receives an ultrasound treatment from Val Forrester.

Bethany College junior forward Cathy Wade has always had an interest in sports medicine and has even thought about becoming a physician assistant in orthopedics. After all, the star athlete has become pretty familiar with sports medicine since entering college.

Wade, a Midwest City, Okla., native, broke her right wrist during a fall her freshman year. She was placed in a cast and little was thought of it. The same thing happened again her sophomore season causing her to miss the last 15 games. After getting placed in a cast

again it was apparent that there was much more wrong than a simple broken bone.

STEADY PROGRESS

Wade underwent five surgeries last summer to reconstruct ligaments of the thumb, remove scartissue damage and place pins to realign bones that had healed improperly. In September, she started seeing Salina Regional's Val Forrester, an occupational therapist and Certified Hand Therapist.

Initially, the two worked on restoring Wade's range of motion in her wrist and thumb. She couldn't make circles with her thumb and had very little grip strength. Therapy progressed using heat and cold treatments, forms of massage, customized splints for protection and iontophoresis—a modality that uses electrical current to deliver anti-inflammatory medication into stiff muscles and joints.

"At first I thought about applying for a medical red shirt this year, but we made steady progress," Wade says. "I thought for a while I was just going to have to be left-handed and I really worried about shooting free throws."

Wade missed the preseason and first two games, but was cleared to play. Two-thirds of the way through the season she was leading the conference in free-throw percentage and had a 27-point performance against McPherson College and a 26-point effort against Tabor College.

HIGHLY SPECIALIZED CARE

To become a Certified Hand Therapist, one must meet rigid requirements including five years of clinical experience and 4,000 hours in direct practice of hand therapy before sitting for the comprehensive board exam.

"You have to have an advanced knowledge of hand, wrist, elbow and shoulder anatomy and physiology and be familiar with the surgical processes used by orthopedists to become certified," Forrester says. "It's really a highly specialized career path to take."

Having that expertise available locally is a great benefit to patients, says Salina orthopedist Byron Grauerholz, M.D.

"Surgery is only half of the equation for regaining function when it's necessary," Grauerholz says. "The other half is getting good



Despite a heavily wrapped hand, Bethany College junior Cathy Wade scored 26 points against Tabor College in January. Photo courtesy of Larry Harwood

rehab and having a therapist who has a good understanding of what needs to be accomplished. Hand therapy is very complicated. There is a lot of communication that takes place between the therapist and the doctor. Patients may see a therapist two or three times a week during a recovery, and they may only see a doctor every other week. So, the therapist has a big role to play throughout the process."

MANY TYPES OF INJURIES TREATED

Hand therapists see all types of injuries ranging from broken bones, amputations and work-related crush injuries to burn victims and cancer patients.

"A lot of what I see is work-related injury, both cumulative injury and traumatic," Forrester says. "Sometimes the injury is the result of making the same type of movement over and over again or sometimes a worker gets their hand caught in a piece of machinery."

Therapy is specially designed for each patient to restore range of motion and strength and regain feeling. In the case of a job-related injury, special equipment is used to replicate tasks a worker must routinely perform as part of the job.

Therapists also play a role in determining disability for the state by using a series of tests to evaluate loss of function.

With cancer patients, swelling, or lymphedema, is a common side effect from treatment because the lymphatic system has become compromised. When this occurs the lymphatic vessels do not drain fluids from the extremities properly. Patients with lymphedema undergo specific massage techniques and exercises to relieve the swelling. Wade had the opportunity to shadow Forrester between semesters this winter in addition to receiving her own weekly treatments.

"I've found that everything involved with hand therapy is very interesting," she says. "I think I want to be a hand therapist now."