**Recognizing Cast Claustrophobia in Your Patients**

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Some people are lucky enough to go through life never to suffer from a broken bone. On the other hand, just in the last year, 6.3 million people sustained fractures in the United States, with the wrist being the most common. Orthopedic physicians are the providers who manage the majority of these fractures. Casting a fracture provides immobility to permit the bone to heal. This is the preferred choice of treatment for most fractures, but for the patient with “cast claustrophobia” it can be anguish.

A phobia is a type of anxiety disorder. It is a strong, irrational fear of something that in reality poses little or no real danger. Claustrophobia is the fear of confined spaces. It affects 2.5% of the United States population. Women are more prone to suffer from it then men. Claustrophobia can manifest itself in many different ways, but the development process of claustrophobia is the same for everyone: the human brain begins to associate danger with the act of confinement.

Many of us associate claustrophobia with an MRI tube; exam rooms with their doors closed, or crowded places such as restaurants. Many people live with claustrophobia, never seeking help. They live their lives without ever having it formally diagnosed and manage it on their own by avoiding the confining places that trigger their symptoms. Since people only experience the emotional or physiological response when they are exposed to the specific confining trigger, some claustrophobic patients are unaware they even have this phobia.

**Case Report:** A 58-year-old teacher fell on her right wrist with resulting pain, swelling and the inability to use her hand. She went to the emergency room where an x-ray revealed she had sustained an impacted, distal radius fracture with minimal displacement. She was splinted and advised to follow up with the local orthopedic practice. She was seen the following day by the orthopedic physician in the office and after a discussion of her treatment options, which included open reduction with internal fixation (ORIF) vs. casting, the patient elected to be casted. As the Orthopaedic Technologist, it was requested that I place the patient in a Muenster cast.  I went to the exam room, where I explained the cast to the patient, her limitations while in the cast, and how to care for it. I proceeded to build the cast while having this discussion with the patient, answering her questions as I worked.  Soon I began to hear inquiries such as, “Are you sure that’s not too tight?” I assured her it would feel snug since most people are not used to having a restriction around a body part, but in the next few days it would loosen slightly. As I continued my work, the next statement was “It feels too tight, like a vice around my forearm.” I recognized the patient was starting to act anxious about her cast, so I inquired if she had any history of claustrophobia. She did explain she had a fear of elevators after being trapped in one many years ago, but not to enclosed spaces in general. She did not identify herself as being claustrophobic. I assured her the cast was at appropriate tightness, but that she may be experiencing a form of claustrophobia related to her cast. The patient again denied any phobias except for elevators. She agreed she just was not used to something wrapped snuggly around her arm and felt she would get used to it. I finished up my treatment with the patient and escorted her to check out where she scheduled her next appointment then left our office.

The next morning the patient called me reporting she was unable to sleep that night. She admitted she almost cut her cast off in the middle of the night. She again said it was just too tight and she was feeling quite anxious about the whole situation. She assured me she was icing, elevating, resting, and doing all the treatments we had advised. Sensing her anxiety, I asked her to come to the office for a recheck. Her exam revealed a properly fitting cast. Again, I explained that she was expressing symptoms of claustrophobia related to her immobilized wrist known as “cast claustrophobia”, reassuring her that it was a response I have witnessed in other patients and there were alternative treatment options.

Next I discussed the patient’s symptoms with the physician recommending that we try a univalve cast, he agreed. I cut the dorsal side of the cast, leaving the gauze and stockinet in place. The patient reported immediate relief of her anxiety and of her restricted and trapped feelings. I then wrapped her univalve cast snuggly with an ace bandage to assure the cast remained in proper position. I assured the patient she could call me anytime if her symptoms continued once she arrived home, or she could go to the emergency room that night if needed.

The next morning I called the patient to check on her and she reported she had a much better night with no anxiety or sensation of her cast being too tight. She reported she even slept well. She explained that just having her cast cut on one side was all she needed to ease her anxiety and anxiousness that it was too restrictive.

We can all reflect back on our years of working with patients and it is typically the “difficult” ones that leave a mark on our memory. The ones who exhibited severe subjective symptoms of excessive anxiety or intolerance to their casting; they present to the ER in the middle of the night requesting their cast to be cut off for various reasons, or they find a way to remove it themselves at home, and patients who report feelings of excessive tightness and discomfort. They request multiple cast changes and adjustments, only to have them return to the office and after careful examination have no objective reason that justifies their level of discomfort and anxiety. There is also the occasional patient that just is not compliant, they do not allow their bodies the sufficient time it needs to heal and request their cast be removed prematurely, or they remove it themselves. A skilled Orthopaedic Technologist will come to understand that these patients once perceived to be “difficult”, are in fact suffering from “cast claustrophobia”.

Since recognizing that “cast claustrophobia” is a legitimate problem for some patients, I am able to better serve them and help them have a better healing experience. Patients sometimes discuss their claustrophobia and that allows it to be managed appropriately at the very first encounter. Other patients are reluctant or unwilling to reveal their phobia. They do not exhibit symptoms during their encounter with you. There are also patients with latent claustrophobia that once home have a surge of panic that unexpectedly arises in relation to their immobilized limb. When a newly casted patient communicates these symptoms to you, it is worth having a discussion with them to determine if they have a history of claustrophobia. If it is determined they do, you can then support the patient to ensure they have a positive experience. Many of these patients are embarrassed and feel like they are the only ones that feel this way. It needs to be explained that their symptoms are triggered by the cast placement and that they are not alone. They need to be reassured that “cast claustrophobia” is a real condition and they should not feel ashamed, as there are alternatives to manage their fracture for their best outcome, both physical as well as emotional.

When you make the decision to become an allied health professional you already understand that you will be providing direct patient care, and are specially trained to work as an extension of the physician. When you apply to The National Board for Certification of Orthopaedic Technologist (NBCOT) to become certified, there are **Standards of Practice** and a **Code of Ethics**that we read and sign as part of the application process. By signing, we agree to support patient safety, their well-being, and also to be an advocate for the patient. This includes their physical, as well as their emotional well-being. Research reveals that careful assessment of patients prior to a procedure will provide a better outcome. Part of an Orthopaedic Technologist’s routine is to assess and interview the patients as we are prepping to place a cast on them. Careful screening questions and educating patients about their cast during this assessment time can often prevent a return visit for the patient with cast concerns. A cast care instruction sheet that patients read and sign is a tool that can include information in it educating patients on the signs, symptoms, and management for “cast claustrophobia”.

Orthopaedic Technologists need to be vigilant in their observation of patients in the office, and, in particular, in the first few days after a cast is placed. When anxiety related to claustrophobia is identified, treatment options need to be discussed with the patient and the physician. For some patients, like the above **case report**, the patients’ anxiety was relieved by adding a simple univalve to the cast, a bivalve cast can also be considered. Other options may include cutting a window in the cast, and removing the gauze and stockinet so the patient can see their limb. For higher anxiety claustrophobic patients replace the cast with a removable splint. The physician would be the decision maker on the kind, either a fiberglass, or a prefabricated splint. There is also the possibility of adding an antianxiety medication, which should be considered a last resort when one of the above options is not successful. The prescribing and management of the medication is generally overseen by the patients Primary Care Physician.

Orthopaedic Technologists play an important role in the success of a patients’ bone fracture healing.  We are often the first line of communication when patients are having issues with their immobilization, including concerns with function, comfort, or a claustrophobic response. While patient satisfaction is our mission, exceeding their expectations is of the essence. When you are providing your patients with high quality compassionate care; your patients will recall their experience. When they are deciding where to go in the future for orthopedic care, or they are recommending to their family, friends, and coworkers where to go; your practice will be their first choice.

 **About the Author**

Kara Jackson is an Orthopaedic Technologist-Certified as well as a Certified Medical Assistant.  She graduated from Beal Collage with her CMA in 2001, and started her orthopedic career in 2006, working in an outpatient office setting.  She is currently employed at Mayo Orthopedics in Dover-Foxcroft, ME.  She is an active member of NAOT and NESOT.

**BIBLIOGRAPHY**

phobia. (n.d.). Dictionary.com Unabridged. Retrieved April 08, 2016 from Dictionary.com website http://www.dictionary.com/browse/phobia

claustrophobia. (n.d.). Dictionary.com Unabridged. Retrieved April 08, 2016 from Dictionary.com website http://www.dictionary.com/browse/claustrophobia

Kanatani, Sumi, and Issei Nagura. “Management of Intolerance of Casting the Upper Extremities in Claustrophobic Patients.” The Scientific World Journal, Volume 2014. Web. 14 October 2014.

Leisa, “Cast Claustrophobia.” FalconHive.com, March 03, 2008.

“Fear/Phobia Statistics” – Statistic Brain. 2016 Statistic Brain Research Institute, publishing as Statistic Brain. April 27, 2015.  http://www.statisticbrain.com

Fallon, Aoibhin. “Opinion: Cast claustrophobia? It’s very real and it’s very unpleasant.” Thejournal.ie. July 19, 2014.