

SPAP Shout Out

A monthly update for SPAP members with a purpose to educate and encourage the engagement of PAs who work with pediatric patients



Congenital Talipes Equinovarus (Clubfoot)

Courtney Bishop, PA-C

Courtney has been a member of the SPAP Board of Directors since 2012, first as the Student Representative, then Secretary, President-Elect and now President. She is a 2013 graduate from Chatham University's Physician Assistant program in Pittsburgh, PA. Since 2013, Courtney has worked in the Orthopedics Department at Nationwide Children's Hospital in Columbus, Ohio, where she is also a member of the APP Advisory Council. She is also a preceptor for Ohio Dominican University's PA program. In her free time, Courtney enjoys reading, traveling, and supporting her favorite sports teams including the Columbus Crew, Ohio State Buckeyes, and Tottenham Hotspur.



Congenital talipes equinovarus, more commonly known as 'clubfoot' is an idiopathic deformity of the foot that is seen in infants. It is often considered to be a 'packaging' disorder, however, the complete etiology is unknown. Clubfoot is the most common musculoskeletal birth defect with the overall incidence is 1:1000, however some populations including Hawaiians and Maoris have a higher prevalence. Males are more prone to clubfeet than females by a 2:1 ratio. Siblings of children with clubfeet have a 10% chance of clubfeet, which is higher than the overall incidence.

Approximately 50% of clubfoot patients present with bilateral involvement and 50% only have unilateral involvement. The vast majority of children (80%) with clubfeet have no other deformities, however other disorders may be associated with clubfeet including myelomeningocele, arthrogryposis, tibial hemimelia, diastrophic dwarfism. Children with a clubfoot should also be evaluated for developmental dysplasia of the hip and torticollis. Clubfeet are often considered to be secondary to a 'packaging disorder' however studies have also shown that there is often peroneal muscular atrophy, muscle fibers are smaller in affected legs, and that in individuals with clubfoot, the affected side has a smaller calf muscle throughout the life span than the contralateral side, even

years after successful correction, and there are other histochemical changes that have been found. These muscular changes have led providers to believe that there may be other underlying causes other than just positioning in utero. One such theory is that a neurologic event such as a stroke may have occurred in utero causing a mild hemi or paraparesis.

There are four parts of the deformity that create a clubfoot, and can be remembered with the mnemonic 'CAVE'. They are **C**avus, **A**dductus of the forefoot, **V**arus, and **E**quinus. More often clubfoot deformities are recognized during a fetal screening ultrasound, however a physical exam after birth is necessary for diagnosis. While most children with clubfoot have no other medical issues, a full body examination should be completed to evaluate and hopefully rule out other syndromes including arthrogryposis and myelomeningocele. Radiographic imaging is often not necessary for diagnosis in infants, and clubfoot is diagnosed clinically. X-rays are sometimes obtained if there is concern for other disorders including tibial hemimelia.

Children with possible clubfeet should be evaluated by an orthopedic surgeon that has been trained to correct clubfeet. One of the most common treatment courses is via the "Ponseti Method". Many patients respond well with serial casting over the course of many weeks (often around 6) as an infant and a percutaneous tenotomy of the Achilles near the end of the course of serial casting. Serial casting is often initiated when the child is a few weeks old, but this may be delayed if the child is premature, too small for appropriate casting and correction, or has other medical issues that require heel sticks or other close observation of the lower extremity.

After correction with serial casting, children are often then transitioned to foot abduction braces, which have a variety of brand names, and consist of special shoes that attach to a bar. Families are often instructed to have the children wear the shoes and bar for approximately 23 hours a day for a few months after the correction. If there is no concern for recurrence, the children can then decrease the time of wearing the shoes and bar to naps and nighttime, which continues until the child is approximately 4 years old. The braces help to keep the foot in the appropriate position as the feet grow with the goal of limiting the possibility of recurrence of the deformity.

Over 80% of clubfeet are treated successfully at a young age, however there is an approximately 25% recurrence rate. Signs of recurrence can be the child walking on the lateral border of their affected foot or toe-walking. When there is recurrence of a clubfoot, sometimes it can be appropriately corrected with a second round of serial casting, but surgical intervention may also be necessary.

Most individuals that are born with clubfeet that are treated are able to live completely normal lives without any complications secondary to their history of clubfeet. Some famous athletes that were born with a club foot include Troy Aikman, Mia Hamm, Charles Woodson, and Kristi Yamaguchi.

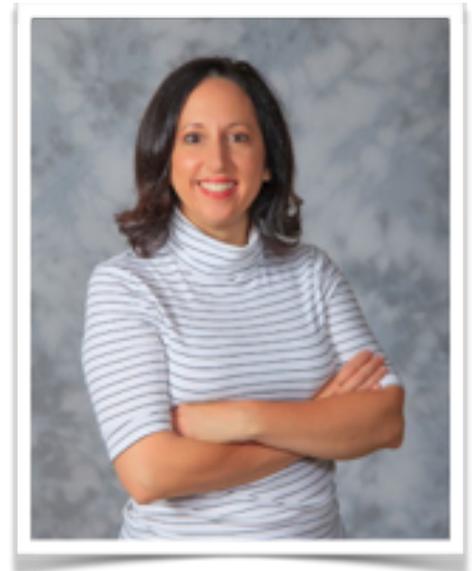
NEW STUDENT NEWSLETTER

We will be starting a brand new student newsletter soon! Student newsletters will be sent to all SPAP student members. Newsletters will provide advice on how to ace your pediatrics rotation, tips on interacting with patients, and much more! Keep an eye out for the first edition release in a few weeks. If you have any questions about the newsletter or would like to get involved, please contact our student representative, Morgan Dailey at medailey0805@email.campbell.edu

SPAP Member Spotlight

Judy Truscott, PA-C

Judy completed her training at Chatham University's PA program in 2008. She then worked full-time as a PA in the ED of Children's Hospital of Pittsburgh from 2008 - 2012 . She also started working as faculty at Chatham's PA program and has been the Program Director since January of 2017. She uses her previous business skills as an industrial engineer and her clinical skills molded together. She also continues to work clinically at Children's Community Pediatrics (CCP) urgent care, a branch within Children's Hospital of Pittsburgh.



How did your career as a PA start?

It started when I decided to focus on my career passion to work in medicine and with children. I became a PA in my mid 30s after spending nearly 10 years working as an Industrial Engineer.

Since I was in high school, I wanted to work in pediatrics but was swayed by my family and followed my brother into the engineering field. I gained a lot of great experience, working with people from all walks of life and managing large projects. But, the passion for work was always missing. So, in my early 30s, I took a leap of faith and began taking pre-requisites for PA school. I started PA school on the same day that my younger daughter started kindergarten and my older daughter started 2nd grade. So, it was quite a busy couple of years for our family.

What does your average day at work look like?

My academic appointment involves much administrative work to ensure that our students meet all accreditation standards and graduate as excellent PAs. I teach in our problem-based learning class which focuses on clinical medicine. I also teach Introduction to the Profession, work with students in our physical diagnosis lab, lecture on pediatrics, run a pediatric lab, and work with students right before clinical rotations doing clinical procedures. Like in the clinical setting, no day is the same as

the last. On Monday afternoons, I leave my academic setting and go to my true love, my clinical job. I work with a small group of: one NP, one physician, two nurses, and two MAs. We see 40-50 patients in 4 hours, so it is busy, but so rewarding. Our patient load and acuity are typically what you might expect; a lot of URIs, headaches, sore throats, abdominal pain, etc. However, there are often patients with higher acuity that can be managed well outpatient with good patient education. When I worked in the emergency department, we had the luxury of holding patients such as this a little longer or performing different diagnostics than are available in an urgent care. My current job requires me to think a little more on my feet when I have sicker patients and trust my training and knowledge more than I had before. I really enjoy that.

How did you first hear about SPAP?

I was looking to find an organization that supported PAs in pediatrics, and honestly just happened upon SPAP!

Why pediatrics?

I love working with children of all ages, but I really love the hugs that I receive from toddlers. I also really enjoy working with adolescent patients who in the rest of their lives are very concerned about their image and their friends, but when they are sick and feel vulnerable, they can be kids again and are just grateful for someone to help them. Being able to interact with families is rewarding to me as well. Although I work in an urgent care setting and do not have the long-term relationships that someone in general pediatrics would have, I do my best to connect with the patient and the family in the short time that we spend together.

What is your favorite part of being a PA?

My favorite part of being a PA is being able to work with so many great people. I enjoy working on a team with physicians, nurses, and medical assistants. When we are really busy and everyone pitches in to make the experience good for our patients, I feel proud of our team. I love to connect with patients and families and help to explain their disease process and next steps. I like to be able to answer questions that they may have, some that they have never gotten an understandable answer before.

Any advice for new PAs or PA students?

My advice for both new PAs and PA students is – don't beat yourself up if you don't know something. We all are stumped by things sometimes and that is okay. Work hard but remember why you went into this profession in the first place and continually remind yourself of that! Not every day will be easy, but there is reward in each and every day.