



Foot Care for the Ages

Greater awareness of early intervention for pediatric flatfoot and other issues will prevent complications for patients later in life

By **CHRISTINE UMBRELL**

Need To Know

- Too many physicians and pediatricians fail to check children's feet for early indicators of future problems, meaning there are missed opportunities to treat flatfoot and other problems at an early age.
- If the calcaneus of pediatric patients is very everted at age 5, their flat feet should be addressed—even if they are not experiencing pain. Early intervention may prevent patients from developing bunions, pain, and other conditions requiring surgery during their adulthood.
- Genetics play a role in the shape of our feet, so foot-care professionals can learn a lot about their pediatric patients by asking to see their parents' feet. In addition, foot-care professionals treating adult patients may suggest that their patients check their children's feet for signs of flatfoot or other conditions requiring attention.
- Foot-care professionals of all types must work together in ensuring patients receive the most appropriate treatment. Open lines of communication are necessary so physicians provide clear instructions and ample documentation to the pedorthists or orthotists who provide and fabricate shoes and braces.

HEALTH-CARE PROFESSIONALS WITH EXPERTISE in foot care—podiatrists, pedorthists, and orthotists—often see patients as adolescents and adults who present with problems that may have been avoided had the patients been treated as children. An increased focus on early identification and prevention—among all foot-care professionals and their referral sources—can result in a better outcome for patients with flatfoot and other foot issues.



LOUIS DECARO,
DPM

"Too many people believe children's pain issues are 'growing pains,' or that pain is caused by 'overactivity'”—but frequently these issues are biomechanical problems, says Louis DeCaro, DPM, owner of DeCaro Total Foot Care Center in West Hatfield, Massachusetts, and president of the American College of Foot and Ankle Pediatrics. Failing to address these issues has led to children



DENNIS JANISSE,
CPED

with foot problems being "one of the most underserved populations in the country," he says.

"Many physicians today just don't have the mindset to check children's feet for early indicators of future problems," says Dennis Janisse, CPed, owner of National Pedorthic Services. "We need to be asking why we haven't been making sure children's feet develop better."

Pedorthist Robert Sobel, CPed, president of the Pedorthic Footcare Association, has treated numerous patients whose adult symptoms could have been alleviated had they been treated earlier. Sobel, who is owner of



ROBERT SOBEL,
CPED



Circling Back to Pediatric Foot Care

One practitioner who is not surprised that so many adults are presenting with complicated, but preventable, foot issues is Dennis Janisse, CPed, owner of National Pedorthic Services. A pedorthist for 45 years, Janisse remembers a time when there was a much greater consciousness of children's foot problems.

"There used to be lots of children's shoe stores specializing in corrective-orthopedic-type shoes, and we did internal and external modifications to shoes. We did a lot of corrective footwear and devices," he says.

But then a study came out claiming that most foot problems in young children eventually self-correct.

"After the study, most children's orthopedic shoe companies went out of business," says Janisse. "At the same time, the athletic shoe market started to take off" and children resisted wearing unfashionable shoes.

Unfortunately, he adds, not all children's foot issues self-correct. Many children who would have benefited from corrective footwear or braces over the past 20 to 30 years have been left untreated—and have grown into adults with painful foot issues.

"I'm excited to hear people starting to talk about corrective shoes and orthoses for children again," says Janisse. "We get optimal results when we treat patients when the foot is still moldable—and when children are young enough that they are not as concerned with fashion in their footwear."



Flatfoot in children 5 and older should be examined and treated.

PHOTO: Louis DeCaro, DPM

Sobel Orthotics and Shoes in New Paltz, New York, notes that some pediatricians—perhaps due to insufficient foot training—do not refer patients who present with issues such as flatfoot and high arches to foot-care professionals. He suggests that more education should be given to pediatricians. He also advocates for a national foot-care awareness program, similar to the scoliosis check children are now given during annual exams. Such a program could lead to fewer foot complications as children grow.

"Unfortunately, the traditional style of treatment in children has been more of a wait-and-see or 'they'll outgrow it' approach," agrees Bob White, CO, of Prosthetic & Orthotic Solutions in West Springfield, Massachusetts. "Although there are not a great deal of studies proving early orthotic intervention in children prevents problems or deformities in adulthood, we do know that by improving biomechanical alignment we allow improved muscular efficiency and the potential for greater stability and control."

Until a larger focus on these issues becomes a nationwide reality, foot-care professionals of all types can do their part to identify and treat problems early.

Recognizing Symptoms

One of the reasons so many children go untreated is because some physicians fail to delve deep enough into why children experience foot or leg pain, says DeCaro, who treats hundreds of adult patients—often surgically—for foot issues. In addition, most young children with flat feet—perhaps the

most frequently undertreated foot problem—don't feel any pain at all. But those children are likely to develop bunions, pain, and a variety of other health issues in adulthood—many requiring complicated surgery.

"If the patient is putting excessive pressure on the medial aspect of the foot (especially with a flexible foot), the hallux can't function as it should—which ultimately ends up limiting range of motion and causing a range of issues," explains Sobel. "This can be especially challenging for the diabetic population; adults with flat feet are putting a lot more pressure on areas where they shouldn't, which causes ulcers and other problems for diabetics."

DeCaro emphasizes that flatfoot itself cannot be prevented, but some of its complications can be: "You can slow down the progression," he says, citing Oprah Winfrey as a famous example of someone whose feet were left untreated in childhood. "Oprah has bad bunions," he says. "If her feet had been controlled from an early age, those bunions never would have formed."

Depending on the severity of the issue, flatfoot can be treated by pedorthists, orthotists, or podiatrists. Although every patient will need an individualized treatment plan, DeCaro emphasizes three "must-haves" in an orthosis: a deep heel cup (at least 25 millimeters in depth), an aggressive medial skive, and a functional lateral wall to control the abduction present in the pediatric flatfoot.

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Of course, flatfoot is not the only issue that may be overlooked in children. Conditions such as in-toeing, out-toeing, and high arches also should be examined early on to decide if intervention is warranted, says Janisse.

Factoring in Genetics

One easy way to identify children who may have foot problems as adults is to look at the feet of their parents. "Feet are genetically related, just like hair color and eye color," says DeCaro. "Apples don't fall far from the tree. If someone has bad feet, they're probably going to give them to their kids and their grandkids."

When treating children, DeCaro asks the parents to show him their feet. "Everyone in my treatment room takes off their shoes and socks. I don't care how ugly you think your feet are—I want to know what the genetics are here."

It also works vice versa—the "single best way" DeCaro grows his practice is by asking his adult patients who require complicated surgery to go home and look at their children's feet—and bring them to his office for preventive care if the children's feet are similar to their own.

DeCaro also encourages other foot-care practitioners to examine the feet of patients' family members. "Whether it's your patient or a patient that was sent to you, ask the people that you're bracing or the people that you're helping out, 'Do you have kids and grandkids?' As practitioners, it's our obligation to help all, and so I translate that into helping everyone, even above and beyond your patients."

Age-Appropriate Evaluation

To assist other practitioners in identifying whether foot issues should be treated, DeCaro has done extensive research and has developed age-specific guidelines for identifying flatfoot.

For the youngest patients, symptoms other than pain need to be closely monitored. "Kids in the 1- to 4-year-old range don't typically complain of pain, but they have balance issues, coordination issues, and posture issues," he says. Looking closely at the calcaneus



Genetics plays a significant role in foot development.

is the key to treating this age group. "All of the control of the foot really comes down to the amount of calcaneal eversion, basically the calcaneal position. If the calcaneus is very everted, there's probably something there you're going to want to treat. The forefoot usually doesn't play a role."

Evaluating 5- to 9-year-olds is similar to 1- to 4-year-olds, says DeCaro. "In general, you're treating them mechanically the same way." The important thing to remember with this age group is that, by age 6, children will no longer grow out of flat feet: "At the age of 5, if they have a poor foundation, that's bad, and needs to be addressed." DeCaro emphasizes that if flatfoot is not treated with this age group, these individuals may start to experience pain in their 30s or 40s. "So it's just waiting to happen—no pain at young ages is an unreliable indicator."

Finding a Common Language

Once a pediatric patient gets in the door, foot-care professionals need to work together to provide the best

treatment plan. "There really needs to be more communication between physicians and pedorthists," says Janisse. "The physicians are the diagnosticians and the prescribers, and the pedorthists have the expertise to provide and fabricate shoes and devices. We need a good referral with a good description" to best serve the patient.

"Too often, an orthotist is making a brace in the dark because there is not enough information in a prescription," agrees DeCaro. He tries to include videos and photos of patients walking with his prescriptions, to aid orthotists and pedorthists in designing devices.

DeCaro believes that understanding patients' foot types will help all health-care practitioners effectively educate patients about the relationship between their foot type and their conditions. Podiatrists, pedorthists, and orthotists are trained very differently, so practitioners need to find a common language.

Understanding biomechanics is key to optimal treatment. "It's important for us all to know it, because whether

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Promoting Collaboration Among Foot-Care Professionals



Pedorthists, podiatrists, and orthotists have overlap in their patient bases—but rather than competing with one another, a collaborative approach to treatment can result in more satisfied patients as well as more referrals.

"Remember everyone has their area of expertise," says Robert Sobel, CPed, owner of Sobel Orthotics and Shoes in New Paltz, New York, and president of the Pedorthic Footcare Association. "We need to have respect for each other and understand where each one's strength lies. Then everyone stands to benefit—especially the patient."

Sobel works with a diverse array of podiatry groups. "They utilize my services when they need something they can't get—they'll send

patients here and let me assess and evaluate and give my recommendation." Sobel also refers patients who need significant bracing to area orthotists. "We work in tandem with a multitude of different practitioners, including orthopedic surgeons, to get patients the best results."

Bob White, CO, agrees that a multidisciplinary approach to patient treatment "allows each specialist to combine their individual strengths to help maximize patient outcomes." White, who works at Prosthetic & Orthotic Solutions in West Springfield, Massachusetts, makes it his goal to be available "to help plan, evaluate, or troubleshoot any problems that arise during the course of treatment. Any time there are complex problems or goals that require a specific outcome, collaboration is necessary to have good success.

"I try to remind myself that everyone's voice is necessary to reach the common goal," says White. "The patient, the prescribing physician, the other practitioner, and myself are all usually working toward the same outcome, and we will always need to find a way to work together to get there."

examining arch height, assessing toe-sign, evaluating gait, and identifying callus patterns. This can be applied to all patients 10 and older. Based upon these steps, patients are identified as one of 24 foot types, which are classified under six main categories: severe pes cavus, mild pes planus, neutral foot, moderate pes planus, abducto varus forefoot, and severe pes planovalgus.

Ultimately, understanding that foot morphology dictates gait—and therefore causes a particular set of symptoms and calluses—will help practitioners determine how to design the best orthosis, says DeCaro.

Education and Opportunity

Increasing awareness of pediatric foot issues will result in more children receiving the care they need to prevent complications as they age. Physicians and podiatrists need to know it's their responsibility to identify problem areas and refer patients to pedorthists or orthotists when the situation warrants. "Pedorthists—and other foot-care professionals—should be promoting pediatric awareness," says DeCaro.

This is especially important given the fact that pedorthists and orthotists cannot treat patients without direction from a physician, notes Janisse. "Many foot-care practitioners would love to address some of these problems in children, but we have a referral issue," he says. Janisse says that updated evidence-based research would help convince referring physicians of the need for more preventive care, and it also would assist in reimbursement.

"Ultimately, everyone needs to be better educated so we can prevent some of the problems that may appear later in life," says DeCaro. "Remember two things: It all comes down to biomechanics, and prevention begets correction." CP

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If the calcaneus is very everted, the patient will likely benefit from intervention.

"you're making a brace for your patient, or you're filling a prescription from an MD or a DPM, we all want to be on the same page," says DeCaro. Informing patients is equally important: "If I send out an order for an ankle-foot orthosis (AFO) for a child, I want the parents to know exactly why there's a need for the AFO. If I send out an order for a supramalleolar orthosis (SMO), they'd better know why they're not getting an AFO but an SMO instead. So education is the key."

Toward that end, DeCaro has worked with Roberta Nole, MA, PT, CPed, to develop a simple algorithm to determine foot type. The patented algorithm consists of four steps:

PHOTOS: Louis DeCaro, DPM