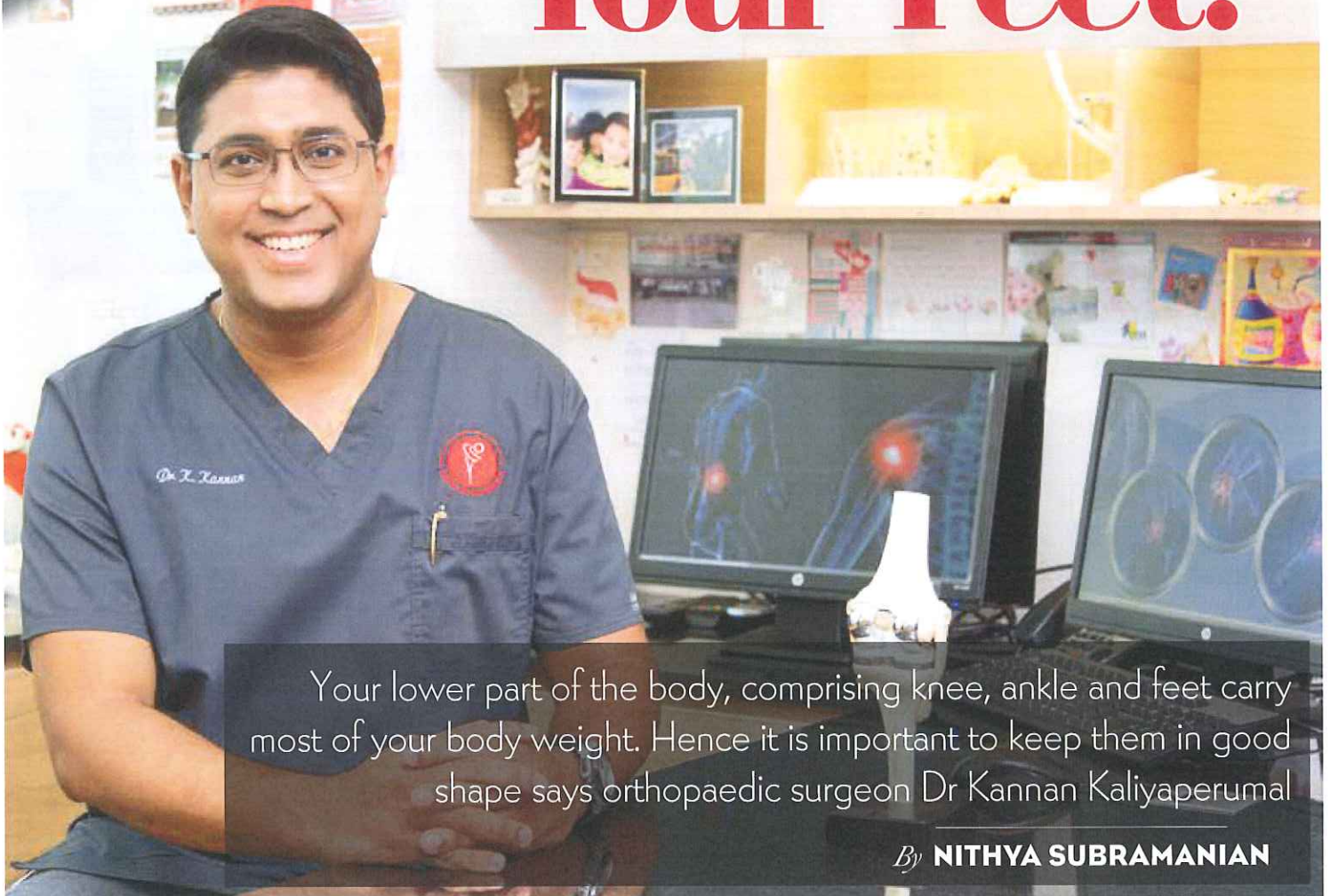


Up On Your Feet!



Your lower part of the body, comprising knee, ankle and feet carry most of your body weight. Hence it is important to keep them in good shape says orthopaedic surgeon Dr Kannan Kaliyaperumal

By **NITHYA SUBRAMANIAN**

Going weak in the knees may not always be a good thing. We often come across people with severe knee and leg problems that hinder their daily simple routines literally echoing the words of R&B band SWV's (Sisters With Voices) chartbuster number Weak: I get so weak in the knees I can hardly speak, I lose all control and something takes over me.

In reality, ailments of the lower part of the body are not always matters of song and dance. So it is extremely important to take care of them right at the beginning. Dr Kannan Kaliyaperumal, Consultant Orthopaedic Surgeon, Foot & Ankle Specialist at the Centre for Othopeadeics Pte Ltd believes that the modern day lifestyle makes one prone to injuries of lower limbs, particularly of the foot and ankle.

He said that orthopaedic medicine is now so highly evolved that Minimal Invasive surgery is an option. Dr Kannan is one of the two surgeons in Singapore accredited in Minimally Invasive Surgery of the Foot and Ankle. "I never fail to get satisfaction in getting my patients back on their feet soon after treatment or surgery. In many instances, after very simple minimally invasive interventions, a person's quality of life improves because they are able to return to their usual routines. I am always grateful for the opportunity to help," he said.

Here are excerpts of an interview with Dr Kannan:

India Se: Tell us a little about your background/education. What were your formative years like?

Dr Kannan: I am a first generation Singaporean born to parents who

were from India. My father is a retired teacher and my late mother was a homemaker. My mother's hometown was Pondicherry and much of my early childhood memories are of this beautiful town where I spent my school holidays.

During my formative years, my mother indoctrinated the values of hard work, discipline and honesty in me. I will always cherish the unconditional love that she showered upon all of us.

My ambition to pursue Medicine largely stemmed from my interest in Science when I was in school. I have always been fascinated with the wonderful complexity of the human body. The greatest privilege of practicing Medicine is the multiple opportunities of working with people at the most vulnerable moments of their lives, the responsibility that is felt when implicit trust of their well-being is squarely placed on me.

Having completed my education in Singapore, I am an alumni of Raffles Junior College and got my medical degree from the National University of Singapore (NUS), I received my postgraduate qualification from the Royal College of Surgeons in Edinburgh. I was awarded the prestigious MOH Scholarship by the Ministry of Health (Singapore) to pursue further training in the field of lower limb reconstructive surgery with special emphasis on Foot & Ankle Reconstruction.

I spent time in Switzerland and in the Netherlands for my subspecialty training. I am one of two surgeons in Singapore who are part of GRECMIP, a society for Minimally Invasive Surgery (MIS) surgery of the Foot and Ankle.

I was with a government-restructured hospital for more than a decade, where I started and headed the Foot & Ankle unit before commencing private practice.

India Se: What prompted you to choose orthopedics as an area of specialty? And why did you further choose lower limb surgery?

Dr Kannan: I have always found Orthopedics to be highly challenging, as it is a specialty that involves the treatment of the

musculoskeletal system, which is made up of your body's bones, joints, ligaments, tendons, and muscles. In orthopedics, I get to work with my hands to build & reconstruct, coupled with the most cutting edge tools for my patients' varied disorders. At that time when I chose to subspecialize in lower limbs, foot and ankle surgery, the subspecialty was pretty much in its nascent stage with very few surgeons trained in it.

However, I saw great potential in being one of the rare few surgeons in Singapore to focus in the field.

I am glad that the results have come to fruition, as currently, there are only a handful of specialized surgeons to handle complicated conditions involving the lower limb, particularly, at the foot and ankle.

India Se: Could you talk about some of the common problems/concerns that people encounter when it comes to foot and ankle?

Dr Kannan: Due to our hectic lifestyles, our legs are probably one of the most abused and yet often neglected parts of our bodies. Notwithstanding that our feet bear the full weight of our bodies, we are constantly

on our feet most of our waking moments. Oftentimes, we neglect to take heed of pain from our knees or feet. A quarter of all the bones in the human body are down in our feet. When these bones are out of alignment, so is the rest of the body. In fact, many chronic conditions like backache, knee pain, calf pain and bad posture can be traced back to the ankle and feet. I have many patients coming into my clinic with various knee, ankle and foot conditions. This is when an orthopaedic surgeon comes in to assess these conditions so as to prevent future injuries and maintain long-term functionality before the problem deteriorates.

Some of the more common foot and ankle conditions are bunion deformities, ankle sprains, plantar fasciitis and fractures.

■ Bunion is when there is a bony prominence on the side of the foot, at big toe joint. This enlargement caused by the bone causes pain and can be aggravated by sports and tight shoe.

■ Ankle sprains are a very common sports injury. Any ankle sprain

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with pain or swelling not resolving in a few days needs to be investigated. The potential injuries can range from torn ligaments to fractures to tendon injuries.

■ **Plantar fasciitis** or heel pain is when there is pain under the heel. This is a painful inflammation of the ligament that runs along the bottom of foot.

■ Fractures appear to be on the incline especially for the ankle and foot as more people are taking up sports. A broken ankle or foot can involve one or more bones, and can also injure surrounding connecting tissues or ligaments. A person can also have stress fractures due to repeated trauma over a specific area.

India Se: Indians, especially women, seem to be prone to many bone-related problems. Why is it so and do you see them coming with foot or ankle issues? What are some of the precautions people must take to protect these parts of their body?

Dr Kannan: Osteoporosis is a common condition amongst Indian ladies. Osteoporosis is a condition which results in brittle bones prone to fractures and sprains. It usually co-exists with Vitamin D deficiency. Osteoporosis usually occurs in older women (over 55 years old), but younger women and men may also be affected.

A number of factors can increase the likelihood that you'll develop osteoporosis — including your age, race and lifestyle choices.

We also experience skeleton changes throughout our lives. Our bodies gain bone mass throughout childhood and adolescence and usually remains relatively constant until around the age of 40 years, and then declines in both sexes. At menopause and for several years after, women experience an acceleration of bone loss. Making women more prone to this condition.

Osteoporosis is usually silent until the first fracture occurs. These fractures cause pain and disability, and in some serious cases may even lead to deformity. This is when I have patients coming to my clinic to seek treatment.

Some of the tell-tale signs that bones have been weakened by osteoporosis, include:

- Back pain, caused by a fractured or collapsed vertebra
- A stooped posture.
- A bone fracture that occurs much more easily than expected

The precautionary measure is to protect and strengthen the bones. With a well-managed medical treatment plan to include proper care and a change in lifestyle, the rate of bone resorption by the body can be slowed down. Rather than to find a cure, the best way for Osteoporosis is prevention.

India Se: What is a most commonly seen condition amongst children? What can be done to treat it?

Dr Kannan: One of the most common injuries I see amongst children are paediatric fractures. As children are most active and hyper, it would be impossible to prevent limb injuries in children. Most childhood fractures result from mild to moderate trauma that happens while at play or during sports. The arms are the most common location for children's fractures. Supracondylar fractures (elbow fractures or monkey bar fractures) between the ages of 4-7 are the most common.

We should not discourage or curtail a child's physical activities, rather, we just need to ensure that they have ample protective gear in whichever sports that they are engaging in. A child's growing

bones are bendable and resilient. Children's bones also heal much faster and remodel very well after injury.

Hence almost 90 per cent of these fractures are treated in a cast splint to keep the fractures from moving. Stabilising the fracture allows the fracture to heal up. Rarely a fracture needs to be fixed surgically if it is displaced, rotated or it's a joint fracture. And most of the time, it is usually fixed with some wires to hold the reduction & a cast applied. When a child is in a cast, he or she is still mobile and able to still attend school.

India Se: Tell us a little about your family. How do you balance your work and life outside it?

Dr Kannan: I have a beautiful wife (Cindy) and two gorgeous daughters (Kanishha 8, Krishhana 6). My wife is the pillar of my life



and I try to spend as much bonding time with the three ladies in my life. However, on some occasions when work takes me away and I don't get to see them for a few days at a stretch. I try and make up for that by spending quality time with them over the weekends.

I like being in the gym and running. If I have more time, I would be keen to take up golf. I like football and try to play futsal at least twice a month.

We love the outdoors and we usually spend our weekends rollerblading, kayaking or doing trail walks. My wife and I used to represent our schools in sports and we firmly believe that a sport cultivates discipline and enjoyment. This is why, since young, we believe in exposing our daughters to a myriad of sports like swimming, inline skating, cycling, etc. We enjoy travelling and we try to do trips together as a family where it gives us an opportunity to explore various cities together.