

PULSE

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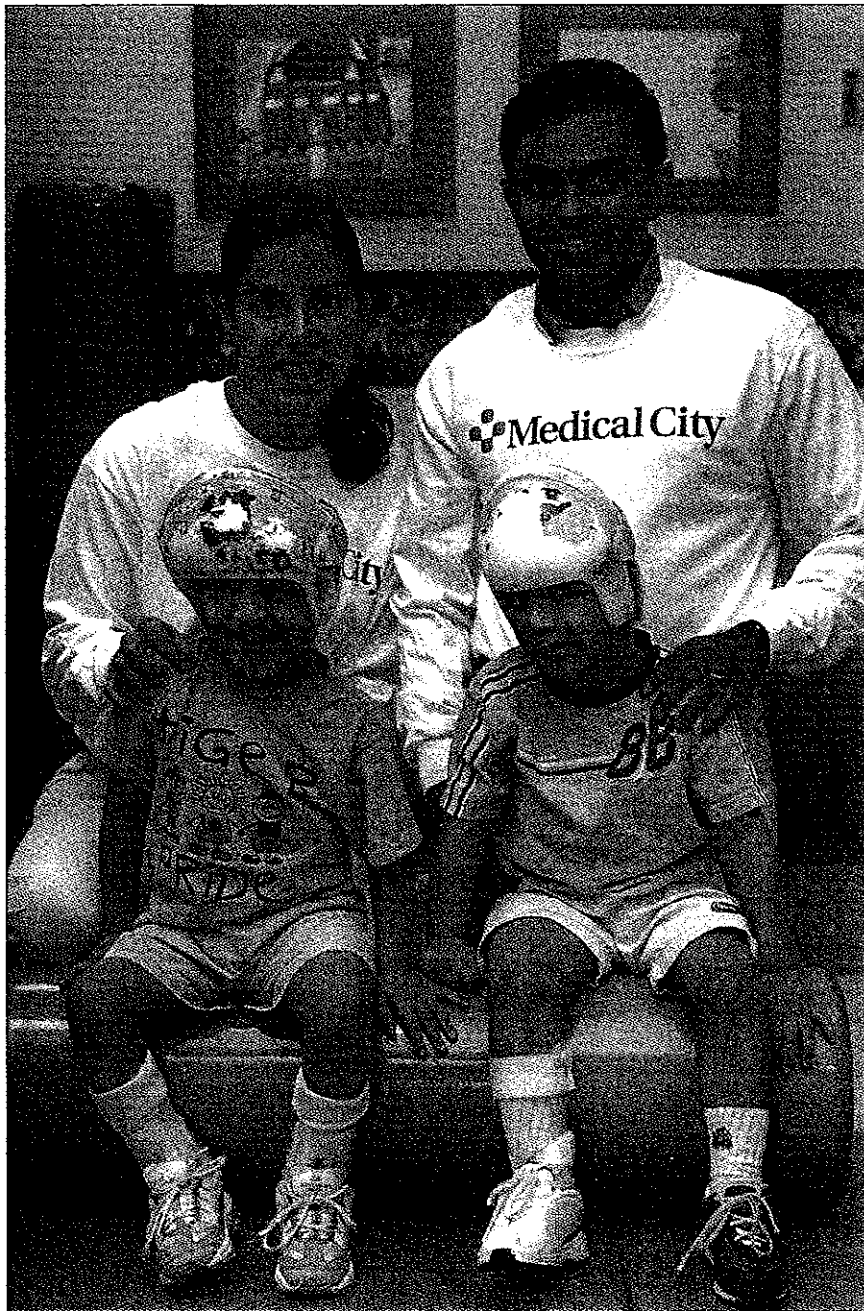


Thriving

A year later, Egyptian twins
are walking, talking miracles

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Pediatric physical therapists aim



Kristen DeMura, DPT, and Jacob Makkappallil, PT, PCS, work with twin brothers Ahmed, left, and Mohamed Ibrahim four times a week at Medical City Dallas Hospital.

Photos by STEVE REED

By Wayne Epperson

PEDIATRIC PHYSICAL THERAPISTS must have a special touch to address the host of challenges faced by patients ranging from premies to 18-year-olds.

No two patients are alike. Not even twins. So treatment plans must be individualized.

Therapists thoroughly evaluate new patients to understand better their physical systems, including range of motion, strengths and motor functions. They also consider their medical and family histories. The data help determine a diagnosis from which therapists can map a plan of care with achievable goals for the patient and estimate how long therapy will be required.

"We work very closely with the parents or family members, because they are the child's primary caregivers. Their goals are important to us," says Jacob Makkappallil, a pediatric clinical specialist and senior physical therapist at Medical City Dallas Hospital.

Therapists also must collaborate with other disciplines, such as occupational therapists, nurses and speech therapists, to better coordinate best practices and treatments.

The ultimate goal is to have patients achieve optimum function for their particular situation.

Formerly conjoined Egyptian twins Ahmed and Mohamed Ibrahim were born with significant limitations, "so they really couldn't do what other children do," Mr. Makkappallil says. The boys weren't "able to explore their environment and various things like that."

After their separation in October 2003, "they were individuals all of a sudden," he says. "They basically had to learn or re-learn

and Mohamed Ibrahim underwent successful separation surgery. They are learning to walk and interact with the world as individuals.

m for optimum function

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KRISTEN DEMURA, D.P.T., Medical City Dallas Hospital

how to do everything.

"They presented with every type of limitation and impairment you would get with any particular child. It definitely was the ultimate challenge," says Mr. Makkappallil, who has been a pediatric physical therapist for 12 years.

The initial objective for the twins was for them to sit alone independently and tolerate being in different positions, such as on their hands and knees. As they accomplished things, they were given more challenging goals of crawling and walking.

The twins receive one-on-one physical therapy in hour-long sessions at Medical City four days a week. Mr. Makkappallil and Kristen DeMura, who has a doctorate in physical therapy, have been working with the twins since their separation surgery.

Each therapy session begins with feedback from the caregivers about how the children have been doing at home. Mr. Makkappallil says, "If there are any issues or concerns, the child may be sick or something, we have to adjust our therapies."

A typical session begins with stretching or balancing activities, with therapists addressing the twins' postural control before moving on to dynamic activities.

"Ultimately our goal at the end of the session might be to get them to walk. So we do all these different things to prepare them for that functional task," Dr. DeMura says.

Each boy has made significant progress with walking. Mohamed began walking sev-

eral months ago while Ahmed was working on sitting balance. Then Ahmed began walking in the last two months. He can walk about 1,000 feet with moderate assistance from therapists for weight shifting to help him maintain balance. Mohamed uses a reverse rolling walker and requires less than minimal assistance to walk up to 2,000 feet.

"Right now our goal for Mohamed is to use his walker independently," says Dr. DeMura, a pediatric physical therapist for 4½ years. "The obstacle he faces is an inability to steer that well at corners. So we are striving for him to just be able to take his walker and walk down the hall independently."

The physical therapists who've worked with the twins reflected on their progress in the year since their celebrated separation procedure.

"You had two boys after the surgery who were basically not able to move anything," Mr. Makkappallil says. "They were not alert; they were not able to move their hands and feet. They have had to go from having full assistance for everything, sitting, rolling, holding their heads up, being able to move their arms and legs, to the point that they are at now — which is walking."

Dr. DeMura says she and other staff members are proud of the boys' efforts.

"We push them hard — they work the whole hour they are here," she says. "We were very excited and pleased with how far they have come." ■

PHYSICAL THERAPY

BECOMING A PHYSICAL THERAPIST

Editor's Note: Jacob Makkappallil has been a pediatric physical therapist for 12 years. He is a pediatric clinical specialist and senior physical therapist at Medical City Dallas Hospital where he also coordinates the activities of student interns. Pulse magazine asked Mr. Makkappallil to talk about what students have to do to enter the field of physical therapy and what they might expect.

Each physical therapy training program has its own admissions requirements. Generally, applicants must have an undergraduate degree, be highly motivated and have a proven record of achievement.

Because the application process is highly competitive and most programs admit only 30 to 40 new students per year, schools consider an applicant's academic record, conduct personal interviews, and sometimes require a written essay for admission.

Training programs have their own academic requirements, but every program calls for students to complete three to six internships in order to develop clinical skills. Interns are supervised and evaluated, and work from four to 12 weeks in a particular area such as pediatrics, acute care or orthopedic outpatient.

Medical City has contractual intern relationships with six schools: Texas Tech University, Texas Woman's University in Dallas and Houston, The University of Texas Southwestern Medical Center, Texas State University and the University of Kansas.

Pediatric physical therapists must have good problem-solving skills, patience and creativity. Schools are affiliated with hospitals precisely so that students can learn, in a clinical setting, whether they possess these qualities.

Generally, physical therapists must be comfortable working with colleagues in different disciplines, and patients of different ages with a variety of diagnoses, some of whom may be seriously ill. The goal for every patient, however, is the same: to achieve optimum function, so that the patient can be as independent as possible and have a high quality of life. W.E. ■