

Editorial

This issue is dedicated to the memory of Dr. Gabriella E. Molnar, one of the founders of the field of pediatric rehabilitation. In honor of her memory, her husband Jack Swafford and the Foundation of PM&R have established the Molnar/Swafford fund. The proceeds from this fund are being used to fund research in Pediatric Rehabilitation Medicine. The first award will be presented at the AAPM&R meeting this November in Atlanta by Mr. Swafford. Details regarding the fund and a memorial to Dr. Molnar *are included in this issue*.

Medicine has changed significantly since Dr. Molnar began her career over 50 years ago as a medical student, as has the field of pediatric rehabilitation. At that time, many wards were filled with pediatric polio patients and iron lungs. Fast forwarding half a century, with the discovery of the Polio Vaccine and international efforts led by the World Health Organization, Rotary Foundation, United Nations and Gates Foundation, polio has become rare in the modern world with most medical students rarely being exposed to the disease. Subsequently, many of those hospitals around the world that treated polio patients have become pediatric and adult rehabilitation centers.

Advancements in orthopedic treatment of children have also changed how we provide pediatric rehabilitation. The surgical repair of the clubfoot – a procedure of every pediatric orthopedic surgeon worldwide – was revolutionized by the Ponseti serial casting technique. The same can be said for the treatment of long bone tumors, which typically led to amputation, have been revolutionized by limb sparing and salvage techniques. Children who faced amputation decades ago, now do not. The Ilizerov apparatus and Taylor Spatial Frames use as external fixators have changed the way limb length deficiency, lower and upper extremity trauma, *arthrogryposis* and other bone deformities are treated. These advancements have improved children's functional capabilities and the need for comprehensive inpatient and outpatient rehabilitation services.

Fifty years ago the insertion of a shunt for hydrocephalus was a new intervention. It is now common

place and children with spina bifida and shunts are expected to live well into adulthood. The same can be said for our understanding of the neurogenic bowel and bladder as it applies to both spina bifida and spinal cord injury. The use of Urodynamics, VCUG's, bladder procedures, antibiotics, cholinergic and anticholinergic medications have improved both the quality and function of many children. The Centers for Disease Control have recently funded a multicentered National Spina Bifida Registry to monitor these patients. Many would agree that treatment variations exist depending upon our individual training received, availability of sub specialists and access to care. The same clinicians would also agree that our treatment of these patients has improved over the decades with the advancements in medical technology in all areas.

These technological advancements in the neonatal and pediatric intensive care unit have led to the survival of children who would have died fifty years ago. Newborns are surviving 23-week gestations – unthinkable when many of us started our medical careers – and not even the slightest consideration when Dr. Molnar started her career over 50 years ago. Ultrasounds, MRI, CT scans, now allow us to “see” what only autopsies showed at that time. As our understanding of these technologies improves we will gain a further understanding of the pathophysiology of all diseases, how to treat them and, more importantly, how to prevent them. From a rehabilitation perspective, our goals will however be the same: How to *functionally improve* the quality of the children we care for.

In writing this editorial, a 6 year old boy with MPS disease comes to mind. As a medical student and new attending, these children died not long after birth. Today, with enzyme replacement monthly he attends school and speaks three languages. He has significant truncal weakness and is unable to sit up on his own or walk – he does use a power chair. His life expectancy is unknown and his rehabilitation needs significant. They may not be in the typical fashion of inpatient or outpatient care but they will be life long.

It will be our responsibility as members of our patients' health care team – and rehabilitation team – to provide each patient and society as a whole – life-long comprehensive care within the advancements of medicine in order that all may fulfill their individual and

societal capabilities regardless of illness, impairment or disability.

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