Medical Rehabilitation of the Adult with Spina Bifida

Andrea Fisher
Israel Spine Centre at Assuta Hospital, Tel Aviv, Israel

Editorial

Adults with Spina Bifida (SB) can now live longer than ever before thanks to advances in medical research. Because of the increase in life expectancy, health care must be extended into maturity. The death of newborns with myelomeningocele had a substantial impact on survival rates prior to 1975. At least 75%–85% of children born with SB are projected to live to adulthood today. However, based on the current statistics, it is impossible to correctly predict the life expectancy of persons with SB. The expanding adult SB population has sparked a slew of research projects aimed at elucidating medical and rehabilitative concerns that affect this group. Neurological, neurosurgical, cognitive, psychosocial, renal/urological, bowel management, mobility, musculoskeletal/orthopaedic, sexual function, skin, and other domains are among them. Complications of the kidneys, heart, and lungs have all been identified as common causes of mortality. The medical and rehabilitation care of these secondary health disorders must be optimised in order to reduce mortality, morbidity, and impairment in adults with SB and improve quality of life.

SB-related secondary problems first appear in childhood, and appropriate early care of these disorders is critical for a smooth transition into adulthood. In the care of children with SB, a coordinated interdisciplinary team approach has been proved to be helpful. However, this type of approach does not necessarily extend to adult care. In general, adult patients with SB do not have access to comprehensive, lifetime treatment. Multidisciplinary clinics are at risk of failing due to a variety of concerns, including programme structure, personnel, and financial support. In reality, there are currently just five clinics in the United States dedicated completely to the care of adults with SB at the time of writing. SB patients have a multitude of physical, cognitive, and psychological challenges as they grow older, which physiatrists are uniquely qualified to address. Whether or not a full clinic exists, the physiatrist may be able to put together a team of specialists to help the adult with SB.

Although the treatment of infants with congenital defects is still debatable, adopting a policy of selective surgery for neonates with meningomyelocele has had the effect predicted by Weather all and White of reducing the number of survivors with this condition and reducing their degree of disability. Most centres adopted a strategy of rigorous surgical selection after evaluating the consequences of a period of more permissive intervention in the late 1960s and early 1970s, when the majority of newborns were treated. The survivors of that time period were found to have a group of children with profound physical and intellectual disabilities, and additional studies of their families quantified the social and emotional costs of their care. Although the number of children and young adults severely handicapped by the effects of spina bifida and meningomyelocele may decrease in the future, it is important to remember that a cohort of those treated during the early years of active optimistic intervention still exists and is in danger of being forgotten by all but those involved in their day-to-day care.

Adults with SB can have a wide range of health depending on their age, the severity of their lesion, the quantity and severity of co-morbidities, their level of self-care abilities, the amount of family and community support they have, and their access to medical care. The influence of lesion level on SB is well understood, with higher level lesions having a greater impact on neuromuscular function, increasing the risk of mobility, skin, spine, and cardiac issues. Cognitive impairments are a risk for those with yelomeningocele and hydrocephalus, especially if there have been multiple shunt issues.

Due to advances in medical therapy of new-borns and children with SB during the last generation, age has an impact on health in this population. Because aggressive newborn care and preventative bladder programmes were only mainstream care after that time period, children born before the mid-1970s will have dramatically different health than those born later. Only those without substantial hydrocephalus who remained uncounted tended to survive early childhood before non-selective treatment. Prior to catheterization programmes, early renal failure was also common, procedures have also evolved with time, with ventriculostriolar shunts, ideal conduits, colostomies, and some orthopaedic procedures becoming more popular in older adult patients, necessitating additional screens and interventions not required in contemporary adolescent patients.

How to cite this article: Andrea Fisher. "Medical Rehabilitation of the Adult with Spine Bifida." J Spine 10 (2021): 496