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Shepherd Center in Atlanta is a private, not-for-profit hospital specializing in the care of people with spinal cord injury and disease, acquired brain injury, multiple sclerosis and other neurological disorders, and urinary problems. The Center houses the largest model spinal cord injury program in the country and an official Multiple Sclerosis Center, designated by the National Multiple Sclerosis-Georgia Society. Serving the Southeast since 1975, the 100-bed hospital offers a continuum of health care services from intensive care, through rehabilitation, transitional care, day program, and outpatient services.

Prologue

by David F. Apple, Jr., MD

In September, 1990, my wife, Jane, and I were in Tokyo, as part of the bidding team making the presentation to the International Olympic Committee to have the Olympics held in Atlanta in 1996. It was an exciting time, which reached its peak when Juan Samaranch came out on the stage and announced "The winner is Atlanta." The exhilaration of the evening obscured the opportunities and challenges that would lie ahead over the next 6 years. Back in Atlanta, after the euphoria had passed and the planning was taking shape for the Centennial 1996 games, those of us associated with Shepherd Center began to think about the Paralympics that had taken place following the Seoul, Korea games. We remembered the failed scramble to hold the Paralympics in conjunction with the 1984 Los Angeles Olympic Games. The challenge was to see that this did not happen again, and the opportunity was to hold them in Atlanta in the same venues utilized for the Olympic athletes.

After some exploratory discussions, it was evident that unless some group stepped forward, the Paralympics would not be held in Atlanta in 1996. The local Olympic movement had their hands full developing the necessary monies and manpower to stage the Olympics. A committee was formed of local and national people concerned with the disability sport movement. Money, an organization, and people were needed to make the presentation to the International Paralympic Committee in Albertville, France. After much effort, a successful bid was achieved and the Paralympic Games were awarded to follow the Olympic Games, which will be staged this summer.

Locally, in Atlanta, clinical interest was developed in fitness for persons with a disability. There had been long-standing involvement in sports for persons with a disability. There were basketball teams, tennis tournaments, track and field competitions, and the successful wheelchair division of the Peachtree Road Race, which had attracted national and international competitors. Where would all this interest lead? The inquisitive mind would want to know the parameters of fitness for persons with a disability. A literature search at that time quickly indicated that very little was written, and very little was known about fitness attributes of persons with a disability. Could the abundance of information regarding the nondisabled be directly applied to persons with a disability? If so, to what segments would it apply and to what areas would it not apply? Is a heart that doesn't have the muscle pump of the lower limbs to assist in circulation more at risk when one adds the levels of activity a competitive sport requires? Does the respiratory system of a quadriplegic athlete respond to the effects of anaerobic and aerobic training in a similar manner to the nondisabled? These and many other physiologic questions have not been investigated in the disabled arena.

Most disabilities involve some form of muscular inadequacy. The arms must totally substitute for nonfunctional lower limbs. The joints and soft tissue structures of the upper limbs must be able to withstand the rigors of high performance training. Will the spectrum of injuries be any different in persons with a disability from the nondisabled? Is the management of sports-related injuries in the disabled any different from those persons without disabilities?

One can see the whole gamut of unanswered questions. Because of the obvious vagueness of the answers to these questions, it was felt, in anticipation of the Paralympic Games, that a volume should be produced that would review what is known presently, and hopefully provide a springboard for further investigation, and stimulate interest in fitness for persons with disabilities. The answer to these questions may be found partially in the words in this volume and maybe not at all. It is our duty as health care providers for persons with disabilities to try to advise that which is best to prevent secondary complications, to increase longevity, and to improve quality of life. Yet, at the same time, we must not advise levels of involvement which will be detrimental and problem prone.

We thank the Department of Veterans Affairs Rehabilitation Research and Development Service for the opportunity to delve into this most interesting and intriguing area.