

Chapter 9

Spine Pain: Aquatic Rehabilitation Strategies

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Physicians tell many patients with spinal injuries and disorders to swim for rehabilitation, exercise, and pain management, but without proper direction, the patient's efforts can be unproductive or even harmful. Water's unique properties offer benefits for the rehabilitation of patients with spinal pain, and various methods may be used to integrate water-based programs into comprehensive training regimens for the average patient as well as the seasoned athlete. Land exercises, swimming, and inappropriate aquatic rehabilitation programs can cause new spinal injuries or exacerbate preexisting spinal disorders, but properly designed aquatic programs can help rehabilitate patients with spinal injuries. Aquatic stabilization techniques and swimming programs can be used with aggressive, comprehensive, land-based spine-stabilization programs or as the sole rehabilitative tool.¹ The success or failure of aquatic therapy candidates is not determined by swimming skills because swim-stroke proficiency is not a model for successful treatment. However, for the highly motivated patient or for injured swimmers, a spine stabilized swim program can be developed with an aquatic therapist. This chapter focuses on the development of a customized program to address spine pain in the general population.

OBJECTIVES

1. Readers will be able to describe key components of the spine pain evaluation.
2. Readers will understand the role of core stabilization in spine pain rehabilitation.
3. Readers will understand how the principles of hydrodynamics are adapted in the formation of aquatic exercises for the spine patient.
4. Readers will understand how to progress water exercises for the spine patient.
5. Readers will appreciate the complexity of spine pain in swimmers.