

Treatment with kinesio taping on the shoulder injuries in water polo players: pilot study

Background: Water polo is a unique combination of swimming, throwing, and martial arts. Physiologically it is extremely demanding, in particular it is an upper extremity sport: there are a myriad of injuries that occur to the shoulder, from the overuse syndrome of throwing and swimming to traumatic injuries resulting from wrestling. The incidence of shoulder pain is directly correlated with the level of competition and years spent competing in the sport.

According to the data published in scientific literature, except in severe cases, the treatment consists in a period of rest, followed by a rehabilitation program and a return to activities modification with avoidance of overhead activities, once pain has been relieved. Treatment should be initiated with the goal of eliminating pain and inflammation, restoring motion, correcting strength deficits, restoring normal synchronous muscle activity, and returning the athlete to a pre-morbid level of function and competitive throwing.

Failure of a nonoperative program is defined as a lack of definitive progress after 3 months or inability to return asymptotically to a competitive level of function by 6 months.

Kinesio Taping has emerged as the rehabilitative taping method within the US and international medical communities. It may look like conventional athletic tape, but tape and Kinesio Taping is fundamentally different. Kinesio Taping is based on a different philosophy that aims to give free range of motion in order to allow the body's muscular system to heal itself bio-mechanically. KT is extremely versatile in its ability to re-educate the neuromuscular system, promote lymphatic flow, reduce pain, enhance performance, prevent injury, and promote injury resolution

Hypothesis: Water polo players with shoulder injuries using kinesio tape will exhibit lower pain and increased level of function without avoidance of overhead activities.

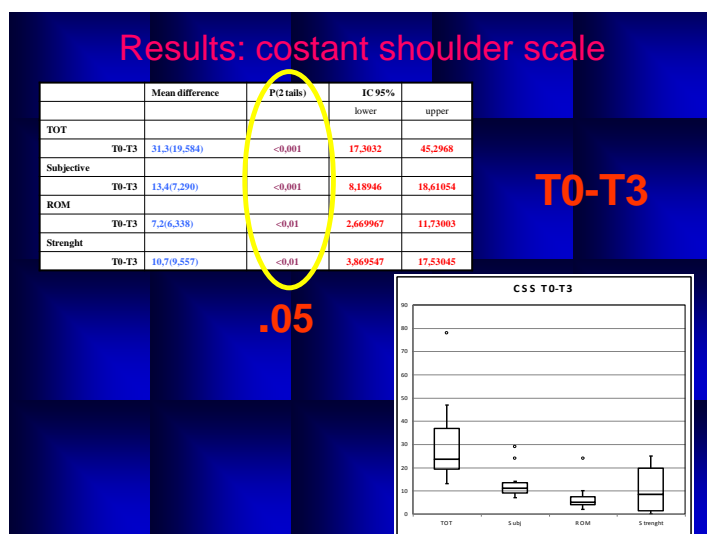
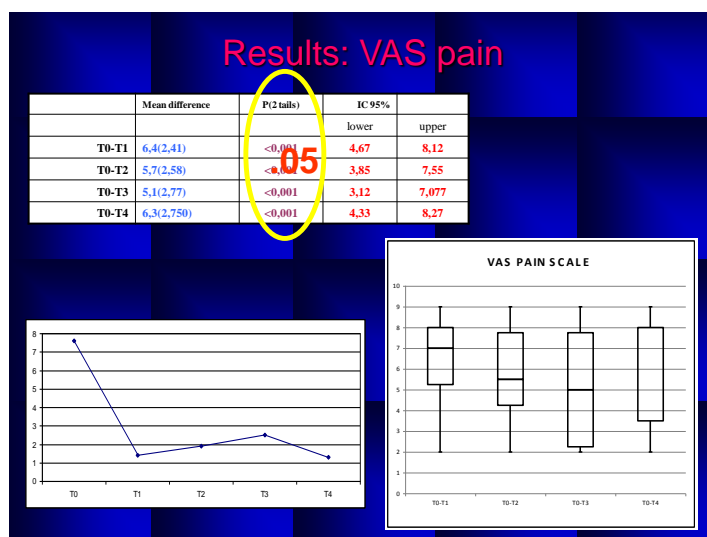
Study Design: pilot study

Methods: Ten water polo players with shoulder injury were evaluated before starting a rehabilitation program using kinesio tape. They were also evaluated after KT application, after the first training with KT, after 1 and 2-months rehabilitation program consisted on

stretching, strengthening of the shoulder and scapular muscle and kinesi taping. In evaluation we considered pain with VAS pain scale and the level of function with the Constant shoulder score.

Results: The athletes exhibited significantly lower pain and greater level of function and they were able to train and to play without activities modification or using anti-inflammatory.

Conclusion: These findings could indicate that kinesi taping method may contribute in the rehabilitation of athletes' injuries.



Results: constant shoulder scale

	Mean difference	P<2 tailed	IC 95%	
			lower	upper
TOT				
T0-T4	39.8(19.786)	<0.001	25.62899	53.94401
Subjective				
T0-T4	16.5(6.485)	<0.001	11.86532	21.13468
ROM				
T0-T4	8.6(6.257)	<0.005	4.127966	13.07203
Strength				
T0-T4	14.7(10.499)	<0.005	7.196482	22.20352

.05

T0-T4

