

PHYSIOTHERAPY

Benefits of swinging with the T-BOW[®] in a chronic knee injury, regarding a case

by Emilio López, Expert in Sport and Fitness Training, EU



HISTORY OF THE INJURY

After a fall due to an imbalance in a jump, I suffered a sprain to my right knee that resulted in a mild strain of the lateral collateral ligament and a partial tear of the medial meniscus. This was complicated by phlebitis that affected the right leg and foot. I underwent arthroscopy to remove part of the meniscus, but the intervention was unsuccessful, leading to a second intervention two years later due to acute pain in the knee during jumping and maximum flexion, as well as generalized edema that caused phlebitis with any impact activity, preventing even running short distances.

During the second arthroscopy, fragments of the torn meniscus were removed and patellar chondropathy was diagnosed. After rehabilitation, I returned to my normal training, but the discomfort persisted. In a new medical consultation, no negative evolution of the injury or new pathology was evident. A repeat arthroscopy was discouraged and strengthening of the vastus medialis was recommended to help center the patella. I continued to train within my functional limitations, avoiding joint impacts and using light loads in pain-free ranges of motion. I also worked on my hamstrings and performed proprioception exercises to improve joint stability, achieving greater tolerance to load and an increase in joint range, although I still couldn't run or jump without pain. I applied ice and anti-inflammatories in case of inflammation. This situation continued for almost 10 years, during which I decided not to undergo another surgery due to disappointing medical results.

EVOLUTION AND TREATMENT THROUGH BALANCING WITH T-BOW®



In 2008, I attended a presentation of the T-BOW® at my workplace. Initially, my interest was more professional than personal, but I was impressed by the potential of the T-BOW® and purchased one for my professional and personal use. During practice, I noticed a progressive improvement in the stability and functional strength of my knee that I had not achieved with cycling or other devices such as the Bosu. Balancing exercises in the frontal and sagittal planes, especially in the frontal plane, showed a notable improvement.



I noticed that my center of pressure during exercise remained more constant, **since not feeling pain I did not need to adjust my joints**. This allowed me to recover a previously distorted lower limb extension motor pattern. I believe that the movement helped me relax and control the opening chain of the lower limb, and that the activation of the adductors benefited the vastus medialis by irradiation. The feeling of work in the peroneal muscles was good, thus completing the closed chain work of the joint. I did not use angulations beyond 60°, which reduced shear. In the sagittal plane, I performed eccentric hamstring work.





To better understand **the therapeutic benefits obtained with T-BOW® swinging**, I learned about the experiences of Sandra Bonacina (inventor of the T-BOW® and professor of physiotherapy and fitness training at the University of Zurich) and Gonzalo Cámara-Navarro (physiotherapist with extensive experience in athletes and in the field of health). With this, I would highlight:

- The T-BOW[®] offers extraordinary reactivity, with a single imbalance axis and low weight, enabling rapid and precise movement adjustments (*).
- This design allows for quick and fine variations in response to even small changes in weight and movement, creating a cushioned swing that minimizes joint impact.
- Placing the feet on the narrow edges of the T-BOW[®] requires bilateral ankle control, promoting leg verticality and excellent segmental independence.
- This setup greatly enhances the functional screwing of the leg's longitudinal axis during lateral swings and provides deep, fine stabilization of the joints.
- The T-BOW® allows for the adjustment of difficulty levels, from basic balances to high levels of functionality, suitable for daily activities and sports. This versatility makes it accessible and beneficial for people of all fitness levels.



(*) Utensils like the Bosu are too soft to achieve good reactivity, forcing rebalancing that is too slow and imprecise, a characteristic aggravated by its multiple axes of imbalance (half sphere), making it difficult to achieve healthy situations for the joints of many individuals.



Thanks to training with the T-BOW[®] and based on my personal observations, I now feel much better and can do two activities that I couldn't do before: running (up to 10 km/h without discomfort) and skipping rope for a few minutes. Although these achievements may seem modest to some, for me they represent a significant advance, since I have not been able to perform these activities without pain for more than 10 years.



www.t-bow.net