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## Taping techniques for the wrist

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### Introduction

Therapeutic taping may be a useful adjunct in the treatment of wrist instability and injury, particularly for patients with occupational-specific demands, such as musicians, athletes, or therapists. There are 2 broad therapeutic taping categories: rigid or stabilization tape and elastic or stretch tape.

Rigid tape is used to support ligaments and the wrist joint capsule by limiting movement and providing proprioceptive input. This form of taping includes 2 components: a base layer that goes directly on the skin and a second more rigid layer that is placed over the base layer. The rigid tape does not directly come in contact with the patient's skin.<sup>1</sup> Rigid tape can also be used as a temporary substitute and/or means of assessing for orthotic use.

The following taping method can be used for patients with ligamentous laxity at the scapholunate interval (Figs. 1-3). Please refer to [Video 1](#): "Taping for wrist stability" for detailed taping instructions and tips. Before taping, the patient's forearm should be positioned in supination with the wrist in ulnar deviation and the digits grasp the thumb; this position promotes extension of the scaphoid. A short piece of white tape is placed first over the scaphoid tubercle winding around the radial half of the wrist ending at the central aspect of the dorsal wrist. A second piece of white tape is placed over the pisiform and then wrapped around the ulnar half of the wrist also ending at the central aspect of the dorsal wrist, slightly overlapping the radial piece. The rigid tape is then placed over the white tape, anchored over the scaphoid tubercle and pulled circumferentially over the radial wrist, again ending at the central aspect of the dorsal wrist. A second piece of rigid tape is placed along the ulnar aspect of the wrist over the pisiform and pulled circumferentially along the ulnar wrist, ending at the central aspect of the dorsal wrist. This taping method supports the proximal carpal row, while allowing wrist range of motion.

Rigid tape may also be used to address soft tissue issues at the wrist. In a case series, rigid tape was applied to help decrease pain symptoms associated with intersection syndrome.<sup>2</sup> The tape was anchored just proximal to Lister's tubercle and pulled in a direction that helped reduce crepitation with thumb motion. Participants

wore the tape during the day for 3 weeks. At the end of 3 weeks, all participants were pain free and maintained pain free and normal function at a 1-year follow-up examination.<sup>2</sup>

Elastic tape is more conforming, and therefore allows for normal tissue expansion. It is used to compress and support soft tissue structures.<sup>1</sup> This form of taping has been found to be beneficial in treating repetitive stress disorders at the wrist.<sup>3</sup> Hypothesized mechanisms of action describe a lifting effect created under the injured area that reduces muscle tension and improves circulation.<sup>4</sup>

Elastic tape has been found to be beneficial for patients with superficial nerve disorders, such as Wartenberg's syndrome, a neuropathy involving the superficial branch of the radial nerve.<sup>5</sup> The following technique may be used to tape patients diagnosed with Wartenberg's syndrome (Figs. 4-6). Please refer to [Video 2](#): "Taping for Wartenberg's syndrome." Position the patient's forearm in pronation and the thumb in opposition. A diamond cut is made in the distal end of the elastic tape, and the index finger is placed through this hole. The remainder of tape is laid down along the dorsal aspect wrist and forearm, along the dorsal radial sensory nerve distribution. With the wrist placed in slight flexion, another diamond cut is made in a second strip of tape with the thumb placed through the hole. The remainder of tape is then applied along the dorsoradial aspect of the wrist and forearm.

Both rigid and elastic tape can be a useful adjunct for patients diagnosed with a variety of wrist conditions. Although various types of tape have become more popular, more research is needed to ascertain the most effective taping techniques and to better understand underlying mechanisms associated with clinical outcomes. Research results would help inform clinical decisions, improve practice guidelines related to taping, and optimize function.

### Supplementary data

Supplementary data related to this article can be found at <http://dx.doi.org/10.1016/j.jht.2016.03.002>.

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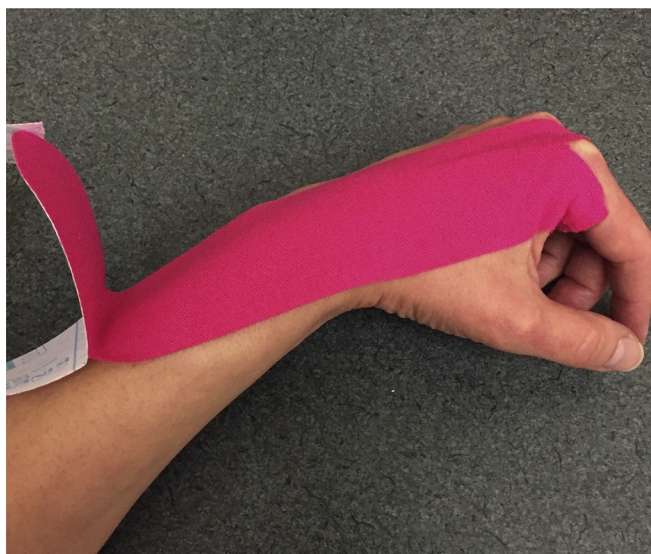
**Fig. 1.** Position: Forearm supinated, fingers grasping thumb with the wrist in ulnar deviation to promote extension of the scaphoid. The short piece of white tape is placed first over the scaphoid tubercle winding around the radial half of the wrist. A second piece of white tape is placed over the pisiform, then wrapped around the ulnar half of the wrist. The rigid tape is then placed over the white tape, anchored over the scaphoid tubercle then pulled circumferentially over the radial wrist, ending at the central aspect of the dorsal wrist.



**Fig. 2.** A second piece of rigid tape is placed along the ulnar aspect of the wrist over the pisiform, then pulled circumferentially along the ulnar wrist, ending at the central aspect of the dorsal wrist, overlapping the radial piece.



**Fig. 3.** This taping method offers support to the proximal row, while still allowing for wrist range of motion.



**Fig. 4.** Position: Forearm pronated, wrist in slight flexion and thumb in opposition. A diamond cut is made in the distal end of the elastic tape and the index finger placed through the hole. The remainder of tape is laid down along the dorsal wrist and forearm, along the dorsal radial sensory nerve distribution.

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