

Successful Treatment of the Pain Associated with Multiple Rib Fractures with Kinesio Taping: A Case Report

The Editor,

Sir,

A 85-year-old male patient applied to our clinic with 10-day history of multiple nondisplaced rib fractures of the fifth through ninth ribs due to fall from height. He complained of severe right-sided chest pain unresponsive to analgesic medications including Tramadol 150mg/day and Paracetamol 1300 mg/day. His pain score was 8.7 on a standard 0 to 10 numeric rating scale. During physical examination, sensitivity to palpation and an ecchymosis with a size of 6x11 cm localized in the lower right quadrant of his chest wall were detected (Figure 1).

A kinesio taping method was planned to improve the patient's pain. The kinesio taping was applied twice (Figure 1 and 2), with four days between applications.



Fig. 1: Application of kinesio taping. The bands were applied with space correction technique.



Fig. 2: Application of kinesio taping. The bands were applied with space correction technique.

His pain intensity decreased to "1.2 out of 8.7" and "0 out of 1.8" on the standard 11-point scale immediately after the first and second applications, respectively. In addition, when the patient was questioned about the analgesic medications, he stated that his analgesic requirement had finished after the first kinesio taping application. Furthermore, no a new application of kinesio taping and the use of analgesic medications were required at the 3-month follow-up period, showing a heal the pain.

In this case report, we presented our experience on the effect of kinesio taping in an elderly patient with multiple rib fracture-related pain unresponsive to narcotic analgesic. We observed a significant reduction in the intensity of pain perceived by patient after tape application.

There are several different kinesio taping techniques that can be used to decrease pain, inflammation, and recovery times. Although lymphatic correction technique is preferable in the acute phase of the injury, we preferred a space correction technique for our patient because he had a 10-day history of trauma. In addition, kinesio taping can provide stabilization of the rib fracture site. However, the literature about the effect of kinesio taping on rib fracture pain is very limited.

Czyzewski et al.⁵ published an initial report (n=14) related to the effect of tape on rib fractures. They applied lymphatic and ligament technique and found that pain levels were significantly decreased after tape application in changing body position from supine to seating, provoked coughing, and deep breathing.

Given that our patient was an elderly and that there is a risk of osteoporosis or osteopenia in elderly, kinesio taping may be a useful stabilization and analgesia method for rib fractures. In addition, because it is a drug-free treatment, kinesio taping appears to be a proper method for individuals who can not use drugs or who have drug resistant pain.

On the other hand, this report has the limitations of case studies, and thus further studies are needed to elucidate the effectiveness of kinesio taping in patients with rib fractures.

In conclusion, kinesio taping is safe, supplementary method for relieving rib fracture pain. However, studies focusing on the effectiveness of kinesio taping in rib fracture pain should be carried out.

AUTHORS' NOTE

The patient was informed and gave consent for the use of his data and pictures.

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