

Case Report
Open Access

Patellar Fracture and Cerclage: A Case Report

Bellia Rosario

Physiotherapist trained at the University of Milan, Italy

***Corresponding author**

Bellia Rosario, Physiotherapist trained at the University of Milan, Italy.

Received: March 24, 2026; **Accepted:** March 26, 2026; **Published:** March 31, 2026

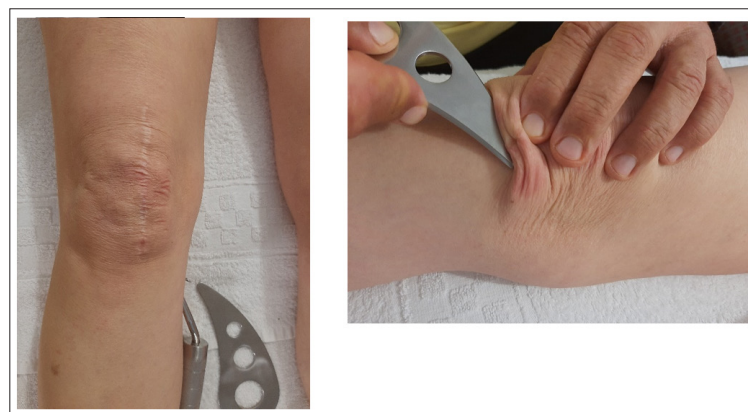
Patellar fractures represent 1% of all fractures in the human body and are most common between the ages of 20 and 50. Studies have shown that men are twice as likely as women to suffer this type of injury.

Fractures can be uncompounded or displaced, with two fragments or comminuted, or with multiple fragments. (Explanatory drawing)



Case Report

A 60-year-old female patient, following a minor fall at home eight years earlier, suffered a displaced patellar fracture and underwent osteosynthesis with a cerclage. The postoperative course was uneventful, and functional recovery was very difficult; after a year, the fixation devices were removed. The patient underwent functional re-education and physical therapy, but regaining her ability to walk was very difficult due to the presence of numerous postural and functional “compensations.” These compensations resulted in functional overload of the contralateral lower limb, resulting in painful dysfunction in the plantar and lateral compartments of the legs in both lower limbs. The surgical scar presents numerous tissue adhesions, which impair patellar mobility during knee flexion and extension.

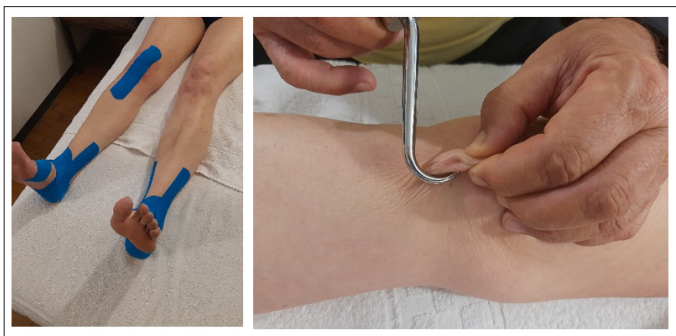


Symptoms

The patient reports generalized knee pain and a feeling of insecurity when walking in both feet, specifically in the anterior compartment of both legs, both at the level of the peroneal and tibialis anterior muscles. The painful sensation in the knee is of a “burning” nature in the patellar and peri-articular area.

Initial Functional Analysis

- Knee mobility is physiological, while the patella is hypomobile in all directions with a certain degree of “friction” in the “patellofemoral” area.
- Hypotrophy of the knee extensor muscles with particular deficit in activation of the vastus medialis oblique. The triceps surae of both limbs are retracted and inelastic, due to the patient’s limited walking.
- The surgical scar is “retracted” in two directions and limits tissue “sliding” during full knee flexion. In the area of the tibial tuberosity, there is a “point” of about 1 centimeter that is very “adherent” to the underlying fascial planes.
- Gait is “uncertain” and the patient can walk approximately 300 meters.



Rehabilitation program: a) Scar adhesion release treatment with various techniques:

- Manual treatment and MTP (Cyriax deep transverse massage)
- Connective tissue and fascial fibrolysis
- Bellia System blade
- Cupping therapy and suction cups
- Application of Bellia System kinesiological taping: decompressive on the scar, stabilizing at the bilateral tibio-tarsal level.
- Analytical and global therapeutic exercise
- Gait re-education



Conclusions and Considerations

The scar emerged as the focal area of all the dysfunction reported by the patient, which is why the physiotherapy treatment focused on the “detachment” of the myofascial adhesions to improve tissue sliding.

When the patient perceived improved mobility of the patella, the knee area, specific therapeutic exercise was essential to improve walking without postural compensation and to have a fluid and physiological movement.

The patient reports that the initial pain symptoms progressively decreased as the rehabilitation program progressed: the final result was satisfactory considering that the surgery was performed eight years earlier.

- Kinesiological Taping training in Korea 2005
- Registration in the Bergamo Register of Physiotherapists No. 110
- President of the Italian Kinesiological Taping Association®
- Adjunct Professor at the University of Bari and Enna

To learn more about this topic with other case reports in physiotherapy, follow this link:
<https://www.tapingbellia.com/frattura-della-patella-e-cerchiaggio-presentazione-di-un-case-report/>

References

1. (2011) Kinesiological taping in sports traumatology practical application manual Alea publisher , Milan MedEdu <https://aleapublishers.nl/>.
2. (2012) Kinesiological taping -Korean method - practical manual for application in modern sports traumatology Alea publisher , Milan - MedEdu <https://aleapublishers.nl/>.
3. (2013) Kinesiological taping in spinal dysfunctions - practical manual for application in modern physiotherapy Alea publisher , Milan - MedEdu <https://aleapublishers.nl/>.
4. (2018) Book Integrated Rehabilitation of Women Following Breast Surgery published by EDRA <https://tcr.amegroups.org/article/view/19572/html>.
5. (2018) Kinesiological Taping in Modern Sports Traumatology” book, Atlante ed. Nuova Piccin – Padua https://www.physio-pedia.com/Kinesio_Taping.

Copyright: ©2026 Bellia Rosario. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.