

CLINICAL CASE STUDY

Functional Improvement in Knee Osteoarthritis Patient Using Stimel-03



80-year-old patient with severe knee osteoarthritis (OA knee), Thailand

Connect Diagnostic

Patient & Treatment Snapshot

Region	<i>Thailand</i>
Patient profile	<i>80-year-old patient with severe knee osteoarthritis (OA knee)</i>
Condition / indication	<i>Severe knee osteoarthritis (OA knee)</i>
Device	<i>Stimel-03</i>
Treatment period	<i>Approximately 3 months</i>

Introduction

The patient had severe knee osteoarthritis associated with chronic pain and significant mobility limitations. Due to advanced age and abnormal blood test results, the treating physician advised against surgical intervention because of the high risk of complications.

Patient Information

Before starting treatment with Stimel-03, the patient required a walker for daily ambulation and was unable to independently go up or down stairs.

Baseline Clinical Status

At the beginning of treatment, the patient demonstrated:

- Chronic knee pain affecting mobility
- Dependence on a walker for walking
- Inability to climb or descend stairs independently
- Limited participation in daily activities

Intervention

The patient underwent regular treatment sessions using Stimel-03 over a period of approximately three months. Treatment focused on improving mobility, reducing pain, and supporting functional recovery in daily activities.

The patient was able to return to a meaningful daily activity - watering plants in front of the house independently.

Clinical Course

Throughout the treatment period, gradual improvement was observed. Pain levels progressively decreased, and the patient became more confident during walking activities.

The patient gradually reduced dependence on the walker and eventually became able to walk slowly without assistance.

Outcomes

After approximately three months of treatment:

- Knee pain was significantly reduced
- The patient no longer required a walker for short-distance walking
- The patient regained the ability to walk slowly and independently
- The patient became able to slowly go up and down stairs again

- Most importantly, the patient was able to return to a meaningful daily activity - watering plants in front of the house independently.

Conclusion

This case demonstrates meaningful functional improvement and increased independence in an elderly patient with severe knee osteoarthritis who was not considered suitable for surgery.

The recovery of simple daily activities and mobility had a significant positive impact on the patient's quality of life. This case was particularly meaningful because it highlighted how supportive rehabilitation technology may help patients regain independence and return to normal daily living activities.

Case Video

<https://youtube.com/shorts/08Ghn-JS3yE?feature=share>

Stimel-03 by Motion Informatics - clinical-grade neuromuscular rehabilitation in a portable, patient-friendly device.