

Case Report

Improved Range of Motion and Reduction of Pain Using Electromagnetic Energy After Arthroscopy for Chronic Knee Pain and Inflammation

A patient's experience: Anesthesiologist, DO, Nashville, Tennessee

Abstract: 48 year old anesthesiologist and long-distance runner. Exercise resulted in chronic left knee pain and inflammation. Pain became constant at 4-5/10 with breakthrough pain of 8/10. The knee became mildly unstable. An exploratory scope determined that an arthroscopic microfracture procedure would be beneficial. The procedure creates small holes in the bone near damaged cartilage. These are called microfractures, which release cells from the bone marrow that can build new cartilage to replace damaged tissue. Trimming and debridement were performed. Immediate post-op pain of 6-8/10 was treated with minimal hydrocodone for 5 days. Post-op day 10 pain was still 6/10. Provant Therapy was initiated as an alternative to hydrocodone. After 6 weeks of therapy, pain reduced to 2/10 and range of motion improved from 70° to 145° flexion and -1° to -3° extension

Patient Details:

- 48 year old male anesthesiologist.
- Chronic left knee pain due to long-distance running.
- Exercise resulted in pain and inflammation.
- Acute breakthrough pain of 8/10. Constant pain of 4-5/10.
- Mild knee instability.

Interventions and Outcome:

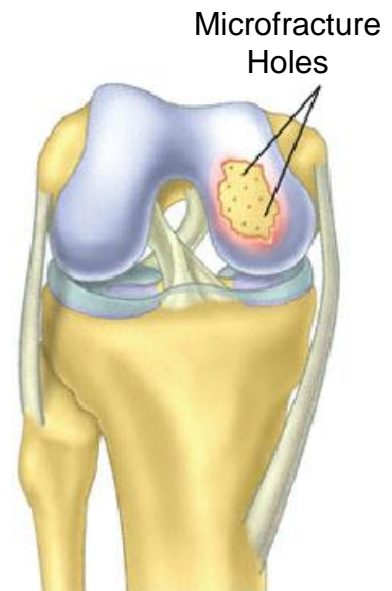
- Previous exploratory scope for diagnosis.
- Patient's desired outcome of surgery was to run short distances.
- Intervention:
 - Left knee arthroscopic microfracture procedure.
 - Defect trimmed and debrided.
- Pain meds: Minimal hydrocodone for 5 days post-op.
- Pain score: 6/10 with breakthrough pain of 8/10.

Alternative Pain Relief Intervention:

- Post-op day 10 pain score remained 6/10.
- Range of motion 70 degrees.
- Provant Therapy initiated as an alternative to hydrocodone.
- 6 weeks of Provant Therapy.
- Pain reduced to 2/10.
- Range of motion improved from 70° to 145° flexion and -1° to -3° extension

Conclusions:

- This patient desired an alternative to opioids for pain management.
- Provant therapy provided reduction in pain and improved range of motion.
- Back to work 6 weeks post-op with pain of 1-2/10.



| | Before Provant | After Provant |
|-----------------|------------------------------|-------------------------------|
| Range of Motion | Flexion 70° Extension -1° | Flexion 145° Extension -3° |
| Pain Score 0-10 | 6/10 | 2/10 |

Post-Arthroscopy Return of Range of Motion after Physical Therapy and Provant Treatments

Active Range of Motion (AROM) Degrees

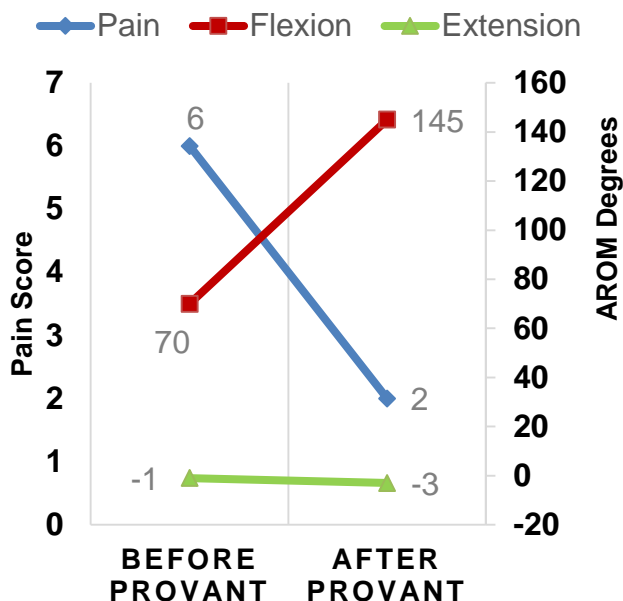


Illustration of the Invisible Dome-Shaped Therapy Field



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Therapy System

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