GenuEase Case Studies

GenuEase[™] has been proven by thousands of patients in clinical rehabilitation centers over the past four years. Numerous case studies documenting the benefits of these products including difficult cases where patients were facing potential manipulations before being introduced to these machines have been recorded.

Case Study #1	
Patient:	K. V.
Dx:	Right Total knee arthroplasty
Date of surgery:	May 6, 2005
Surgeon:	Robert Jackson, MD
History:	Long history of right knee pain secondary to arthritic changes and degenerative joint disease.

Summary:

- Following the patient's TKA surgery on 5/6/05, she experienced cardiac complications and was transferred to the ICU.
- The majority of her hospital stay was in the ICU.
- While in the ICU she did not have physical therapy and the CPM was used on a very limited basis.
- She was discharge from the hospital on 5/14/05.
- Began home health physical therapy on 5/18/05. The patient was treated 3x/week. Treatment included therapeutic exercises as per TKA protocol and gait training. Traditional CPM was also used daily following standard protocol 3x/day for 2 hours each session. Right knee ROM was measured at 10 - 70 degrees.
- The patient was very consistent and compliant with therapy and CPM protocol, but progress was slow with regard to ROM.
- The patient had a follow up visit with Dr. Robert Jackson on 6/9/2005 in his office. He determined that the patient would require a manipulation under anesthesia if she did not demonstrate more rapid progress with her ROM.

- I talked with Dr. Jackson on 6/13/2005 and asked if I could use the GenUbender with the patient to help improve her ROM.. He agreed.
- The GenUbender was introduced to the patient on 6/15/2005. Both the patient and her husband were instructed in set up and proper use. The patient was instructed to use the GenUbender 2-3x/day for 30 mins. each session as per protocol. She was told to hold each stretch for 30 seconds both at end ranges of flexion and extension. Prior to using the GenUbender that day, the patient's ROM was measured at 5 - 90 degrees.
- Discontinued use of traditional CPM on 6/15/2005.
- The patient was very consistent and compliant with GenUbender protocol. She also continued to receive therapy 3x/week via home health care. Therapist worked mostly on strengthening and gait training. Therapist also supervised GenUbender use on his visits to ensure protocol was being followed correctly.
- The patient continued to use the GenUbender until 7/7/2005 (total of 23 days). Her ROM on that day was measured at 0 - 132 degrees. Physical therapy was discontinue as the patient achieved all goals. Manipulation was avoided. Both the patient and Dr. Jackson were very pleased.
- By way of comparison, the traditional CPM was used at home for a total of 28 days. Twenty degree improvement was achieved with flexion and a 5 degree improvement with extension.
- GenUbender achieved a 42 degree improvement with flexion and 5 degree improvement with extension.

Case Study #2	
Patient:	M.O.
Dx:	Left Total knee arthroplasty
Date of surgery:	8-8-05
Surgeon:	Kent Samuelson, M.D.
History:	Multiple past knee surgeries, Degenerative joint disease with arthritic changes resulting in severe pain and limited range of motion.

Summary:

- Following surgery and hospitalization, the patient began home health physical therapy. The patient used a traditional CPM while in the hospital for 4 days, but one was not sent home with the patient.
- Permission sought from Dr. Samuelson to use GenUbender machine with the patient for the next 4 weeks to augment his home health and out-patient physical therapy. Permission granted.
- Began using GenUbender on 8-16-05. The patient was thoroughly instructed in the set up and protocol of the GenUbender machine. He was given a written copy of the protocol. Range of motion was measured on this date and found to be 15 - 70 degrees.
- The patient was very consistent with daily use of the GenUbender, following established protocol. Home health physical therapist worked with the patient on strengthening, gait training, stairs, and supervision of GenUbender protocol.
- Home health physical therapy discontinued after 2 weeks. The patient began out-patient therapy, but continued to use the GenUbender at home.
- The patient discontinued using the GenUbender on 9-17-05. Range of motion on that day was measured at 0 120 degrees. The patient reported that prior to his knee replacement surgery, he was unable to bend his knee much past 90 degrees secondary to pain and degenerative changes.

Case Study #3	
Patient:	R.B.
Dx:	Right Total knee arthroplasty revision
Date of surgery:	8-17-05
Surgeon:	Richard Jackson, M.D.
History:	The patient had a right total knee replacement in 1992. He began having pain and instability in the right knee as of late. He was examined by Dr. Richard Jackson and it

was determined that the components, particularly the joint spacer had worn out. The patient would require a total knee revision.
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Summary:

- Following the patient's surgery and hospitalization, Dr. Richard Jackson ordered a GenUbender machine for the patient to use at home. The patient lives in a remote area. The nearest therapy clinic is miles away.
- A GenUbender machine was delivered to the patient's home on 8-20-05. He was thoroughly instructed in the set up and use of the machine. He was given a written copy of the established protocol. Range of motion measurements were taken and found to be 10 - 85 degrees.
- The patient was contacted weekly by phone to monitor his progress and to answer any questions he may of had. The patient was very consistent and motivated in following the GenUbender protocol.
- September 9th, 2005 marked 3 weeks of using the GenUbender. The machine was picked up from the patient. Range of motion measurements were taken and found to be 0 132 degrees.

Case Study #4	
Patient:	S.R.
Dx:	Left Unicompartment Arthroplasty
Date of surgery:	9-15-05
Surgeon:	Kirt Kimball, M.D.
History:	Long history of left knee pain secondary to degenerative joint condition and arthritis affecting the medial compartment. A total knee replacement was not indicated, as the lateral compartment was unaffected by arthritic changes.
Summary:	

- Following the patient's surgery and hospitalization, Dr. Kirt Kimball ordered a GenUbender machine for the patient to use at home instead of the traditional CPM.
- A GenUbender machine was delivered to the patient's home on 9-20-05. She was thoroughly instructed in the set up and use of the machine. She was given a written copy of the established protocol. Range of motion measurements were taken and found to 20 - 80 degrees.
- The patient also received home health physical therapy 3 times per week to work on strengthening, gait training and to supervise to GenUbender protocol.
- After 3 weeks of home physical therapy and daily use of the GenUbender, the machine was removed from the patient's home on 10-11-05. Range of motion measurements were taken and found to 0 - 130 degrees.