

Case study **Accelerated Recovery**

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I attended Perform at St. George's Park following a recent hip replacement. The whole thing has been fantastic - the programme was structured and well planned out, and I received one-to-one treatment with Paul who worked wonders! Paul was friendly, highly knowledgeable and conveyed well throughout. I have had exponential success as well as some good exercises and great tools to go away with.

Martin Forro, Patient

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Case study

Accelerated Recovery

The Patient

Martin is a 51-year-old man who works in sales in London, is office-based and is active, walking his dog and cycling in his spare time. After having a total hip replacement, he was referred directly by his surgeon Professor Griffin (University Hospital of Coventry) to Perform at St. George's Park to undergo Accelerated Recovery.

Martin's Private Medical insurer funded 25 hours rehabilitation over five days and Martin paid for the hotel accommodation himself to stay on site at St. George's Park while having treatment. Martin's aims were to get back to normal activities quickly – to return to work and be back walking his dog.

State

Martin arrived at Perform at St. Georges Park direct from hospital four days following Left Total Hip Replacement (THR). Although arriving on two elbow crutches the patient was allowed to mobilise full weight bearing and had no restrictions to hip movement. He was treated by Paul Williamson MSc BSc (Hons) BSc (Hons) MCSP HPC – Perform Physiotherapy Lead at St. George's Park.



The Hilton hotel and Perform centre at St Georges Park

Treatment

Martin was assessed by Paul Williamson on Monday morning: Paul filmed his functions – standing on one leg, sitting, his transfer of weight away from the operated leg, stride and step length, his range of movement, strength in the operated hip and his body composition. Paul was then able to put in place a treatment plan for the week.

- Martin received five hours of treatment per day involving:
- Strengthening specific lumbar region including deep abdominals
- Lower limb strength and conditioning
- Improving his gait – getting Martin to walk in the most natural way possible without a limp.

This included using an Alter-G anti-gravity treadmill and underwater treadmill to allow walking without the load bearing. Martin spent an hour walking in the water and 30 minutes on the Alter-G every day Tuesday-Friday.

Treatment was also given to control the swelling around the hip and buttock area using Bodyflow, cold plunge pool and soft-tissue massage. This allowed Martin to lift his leg better allowing for improved range of movement.

Martin also wore the Firstbeat heart monitor to measure his stress levels and quality of sleep.



Hydrotherapy pool at Perform St George's Park

Post-treatment

Martin left St. George's Park nine days after surgery with an increased range of movement (see results below), better balance, his swelling and pain levels has decreased significantly too which allowed great improvements to his ability to function normally. Five days later (at 14 days post-operation) he went back into the office to do some work. He was back to work five weeks post-operation.

At seven weeks, he came back to St. George's Park for a follow-up appointment showing accelerated recovery results. Paul Williamson took Martin through some strength and conditioning exercises, then gave him an exercise plan with filmed exercises that Martin can access online/on his phone for ease of use.



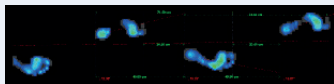
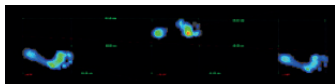

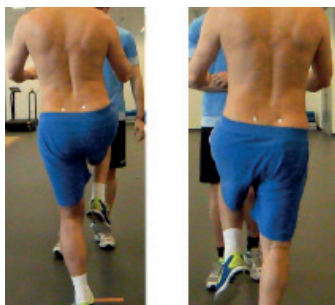
The prognosis for recovery from a total hip operation, depending on the surgery, is 10-12 weeks meaning Martin was back to work/normal activities 3-5 weeks ahead of schedule or 36% quicker than expected. It also meant that the company would recover £3,300 worth of work time due to a three-week early return (based on £50k Sales Manager role in London).

Accelerated Residential Rehabilitation is an effective approach significantly improving both function and wellbeing following Total Hip Replacement. Ongoing follow up will be required to determine if early gains are maintained long term. Early functional improvements may have implications for patients capabilities to return to driving, work and activities.



Soft tissue massage

Outcome

Outcome Measure	17 February 2014		21 February 2014	
Pain NRS	6/10 Resting 9/10 Activity		3/10 Resting 5/10 Activity Pain reduced 50%	
Biodex postural sway 4 pins	Overall – 3.7 A/P – 2.8 M/L – 1.7		Overall – 1.4 A/P – 1.0 M/L – 0.8 Reduced overall postural sway by 62%	
Hip arom Flexion Abduction Extension	Right 105° 40° 5°	Left 65° 20° +5°FFD	Left 95° 35° 0° Significant improvement in ROM	
Thigh Circumference Supra patella 5cm 10cm 20cm	Right 42 48 55	Left 45.5 51.5 59.5	Right 42 48 55	Left 42.5 48 55.5 Thigh circumference reduced by 3-4cm
Wound				
Walking Pressure Analysis At self-determined normal walking speed	 Indicates shorter step length of 22cm & overall stride length		 Increased step length to 40cm & equality of stride length over 2m pressure plate	
Single leg balance	 Note the Left single leg stance weight transfer over left with compensatory scoliosis		 Note the improved postural control during Left single leg stance & less compensatory muscular activations	