



BODYFLOW THERAPY: POST ORTHOPAEDIC SURGERY

After evaluating Bodyflow® Therapy by conducting case studies within their own clinical environment, many leading Physiotherapists and rehabilitation facilities around the world have now incorporated Bodyflow® Therapy as an adjunctive part of their accelerative recovery programs.



CARYL BECKER / CHIEF PHYSIOTHERAPIST / BRITISH OLYMPIC ASSOCIATION AND TEAM GB LONDON 2012

"I am very grateful to Body Flow for providing the Team GB Medical Centre at the Olympic Games in London with two clinical and a number of portable Body Flow units. This relatively new and exciting modality added to the variety of recovery treatments from which athletes and practitioners could choose, ensuring that Team GB had the best possible range of treatment and recovery options available to them."

IAN HORSLEY / EIS NORTH WEST REGIONAL LEAD PHYSIOTHERAPIST & CLINICAL DIRECTOR / BACK IN ACTION REHABILITATION LTD

"I have used Bodyflow consistently within my practice for the last year. It has been extremely useful in the postoperative management of knee replacement surgery, expediting the removal of swelling and, thus, improving pain and range of motion. It has also been useful to reduce acute swelling following injury (and arthroscopy) to restore pain free function. It has become an accepted standard protocol with some of the Olympic athletes that I treat, for the treatment of acute soft tissue injuries, and we are using it more to help enhance recovery following training and competition"

STEVE KEMP ELITE FOOTBALL PHYSIOTHERAPIST / PERFORM AT ST GEORGES PARK

"Having used Bodyflow extensively in the past and being aware of its benefits for lymphatic drainage for sports performance recovery and injury recovery I was delighted to continue this relationship with Perform at St George's Park. With the number of professional footballers attending St George's Park for periods of intensive rehabilitation the Bodyflow is a key part of our management of inflammation in injury and recovery post sessions. Whilst the players are residential for their rehabilitation, this allows us to use the system a number of times a day to optimise the benefits it may have."

LEIGH HALFTECKTEAM GB TAEKWONDO PHYSIOTHERAPIST / ENGLISH INSTITUTE OF SPORT

"We used Bodyflow to help rehabilitate one of the Team GB Taekwondo athletes following an ACL injury in the lead up to the London 2012 Olympics. Regular use of the Bodyflow portable device helped us reduce the negative effects of loading that were essential to be able to push on and ensure the athlete was ready to compete. We highly recommend the Body flow and have also started to use the devices as part of our 'pro-active' recovery strategy."

GREG RETTER / INTENSIVE REHABILITATION UNIT MANAGER

"The Intensive Rehabilitation Unit (IRU) part of the British Olympic Medical Institute has been fortunate to have trialled both a clinical Body Flow machine and several portable units over a 6 month period. During this time we have used the modality with significant success in the reduction of clinical effusion in elite athletes. We have also looked at its efficacy for post-exercise recovery and the subjective feedback from athletes has been excellent. There is no doubt in my mind that this is cutting edge technology which should help to speed up rehabilitation times when used as part of a package of targeted intervention."



"I tore my cartilage four years ago. It was repaired but the joint collapsed and with evidence of arthritis, I was given a knee replacement. Within two weeks an infection set in and a further clean out was needed. The result was a joint with excessive fibrosis. MUA followed and then an arthroscopy.

The joint was swollen and a carefully planned physio programme helped, but the knee remained swollen. Mobility returned but the swelling restricted movement. I was given a trial of the Bodyflow system. Within a matter of days swelling reduced and mobility improved. I used the system several times each day and after each session my knee, quads, hamstring and calf appeared less stiff and the muscles were less painful. Of course there was the increase in urinary excretion but that was a small price to pay for the improvement in reduced swelling and improved movement.

Regular use has certainly improved not only my muscular skeletal efficiency but also my own wellbeing. Rapid progress has been mirrored by a commensurate improvement in my self-confidence.

I am anticipating a second replacement in the next few years and hope that Bodyflow will again be available but at a much earlier time in recovery. The system has helped me considerably."

KEITH MARSHALL

"I first consulted Sports Therapist, Frances Ihenacho, in November 2013 about my knee problem, as I had worked with her previously. My left knee was very swollen and painful; the condition seemed to occur overnight in October 2013. My GP prescribed Diclofenac for the swelling and paracetamol for the pain. In addition, I used ice and heat packs daily.

When my condition didn't improve after several weeks of rest, ice and compression bandages, my GP sent me for an x-Ray which revealed nothing. Frances suggested that I return to my GP and ask to be referred for an MRI scan, which he did. The consultant who I saw advised me that I

would need an arthroscopy, and my surgery was scheduled for the end of July 2014.

In April I went back to see Frances Ihenacho, who suggested using the Bodyflow system to reduce the oedema in my knee, and with a hope to begin some stability and strength exercises with her. I used the Bodyflow for one month, three times a day, and was very quickly able to notice a difference in the knee. I was able to stop taking the anti inflammatory and pain killer medication, and regained my mobility. After the swelling was reduced, Frances introduced me to her specialised rehabilitation exercise program, which built up the surrounding muscles to my knee and corrected my gait and alignment. After twelve weeks of the treatment, I am now confident that I will make a full recovery, and have postponed my surgery for six months, with a view to cancelling if I encounter no further problems.

I am now able to train properly and am considering returning to the gym. I am looking forward to a full recovery without having to go through surgery."

GEORGINA

"I used Bodyflow alongside physiotherapy to deal with considerable swelling in my lower leg following a hip replacement. Bodyflow played a significant part in speeding up my recovery and enabling me to return to ballet more quickly than I had anticipated.

I cannot recommend it too highly as the reduced swelling in my legs, allowed me greater mobility and improved my ability to exercise. I had a couple of sessions on the clinical machine and used the mobile device six to eight times per day and found it simple to use. It really does reduce swelling more quickly than simply keeping the feet elevated. I have also used this device to help prevent swelling on long haul flights and it made a significant difference to the state of my feet and legs on arrival at my destination. I can't recommend it too highly."

HAZEL BLANCHARD

51 YEAR OLD MALE / TOTAL HIP REPLACEMENT



- 51 year old male attended Perform SGP for 5 days of residential rehabilitation
- Referred directly by Surgeon at University Hospital of Coventry
- Private Medical insurance funded 25 hours of rehabilitation over 5 days
- Arrived at Perform St. Georges Park direct from hospital 4 days following Left Total Hip Replacement (THR)
- Although arriving on 2 elbow crutches the patient was allowed to mobilise full weight bearing and had no restrictions to hip movement

Bodyflow Treatment Protocol

Bodyflow therapy devices were used as part of the oedema management protocol. The clinical bodyflow device was applied for 20 minutes at the start of each day and the patient used a portable device to self-administer 5 x 20 minute treatments each day whilst staying on site in the hotel.

OUTCOME MEASURES	DATE: 17.02.2014	DATE: 21.02.2014
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	R L 105° 65° 40° 20° 5° +5° FFD	L 95° 35° 0° Significant improvement in ROM
Thigh Circumference Supra Patella 5cm 10cm 20cm	R L 42 45.5 48 51.5 55 59.5	R L 42 42.5 48 48 55 55.5 Thigh circumference reduced by 3-4cm

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Wound		
Walking Pressure Analysis At Self-determined Normal Walking Speed		
	Indicates shorter step length of 22cm & overall stride length.	Note the improved postural control during Left single leg stance & less compensatory muscular activations.
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.

For further details on how Bodyflow devices were used, the rationale behind its' inclusion and results achieved, please contact Paul Williamson, lead physiotherapist at Perform St George's Park.
email: paul.williamson@spirehealthcare.com or call: 07525 698 634

BODYFLOW CASE SERIES FEEDBACK / SPIRE LITTLE ASTON HOSPITAL



30 YEAR OLD MALE PROFESSIONAL RUGBY PLAYER / COMPLETE MCL RUPTURE & BONE BRUISING

Patient presented with extremely effused knee and only 20° Flexion.

Initial treatment given with the Bodyflow CX1 (Clinical device) there was an immediate improvement in ROM from 20-60°.

The patient continued to use the portable Bodyflow device 6x20 minutes per day during rehabilitation and in the opinion of both the patient and therapist this significantly helped by expediting the removal of swelling.

Patient feedback: *"Amazing results, 20 minutes of treatment enabled me to bend my knee far in excess of the distance I was able to prior to treatment."*

22 YEAR OLD PROFESSIONAL FOOTBALL PLAYER / ACL RECONSTRUCTION

Very swollen effused knee.

Initial treatment given with the clinical device followed by the patient using the portable device 6 x/day as per manufacturer's guidelines.

Therapist feedback showed that there was a significant reduction in swelling with an associated improvement in ROM from 50-90°.

Patient feedback: *"Product felt good in operation. Noticed reduction in swelling."*

21 YEAR OLD FOOTBALL PLAYER / ACL RECONSTRUCTION

Extremely swollen, effused knee.

2 x 20 minute treatments delivered with the Clinical device pre and post STM treatment.

Therapist feedback reported a positive outcome with Bodyflow treatments reducing swelling. Improvement in muscle activity post Rx was also reported.

Patient feedback: *"A little uncomfortable but well worth it for the benefits. Knee feels much more flexible and movement greatly improved after 20 minutes."*

55 YEAR OLD FEMALE / KNEE ARTHROSCOPY - MEDIAL MENISCECTOMY & PATELLA SHAVE FOR OA KNEE

Patient presented with mild effusion & pain.
ROM 110°.

20 minute treatment given with the Clinical Bodyflow device.

Knee flexion improved post Rx to 150°.

Patient feedback: *"Painful to begin with but much improved."*

60 YEAR OLD MALE / KNEE ARTHROPLASTY

Patient presented with tenderness & knee aching at rest.
ROM 90°.

20 minute treatment given with the Clinical Bodyflow device.

Knee flexion improved post Rx to 100°.

Pain ISQ.

Patient feedback: *"Strange feeling at first but when I got used to it it appears to have eased movement slightly."*

64 YEAR OLD MALE / TOTAL KNEE REPLACEMENT

Significant post-op swelling & quadriceps inhibition
ROM 50°.

2 x 20 minute sessions delivered with no improvement noted.

BODYFLOW CASE SERIES FEEDBACK / SPIRE LIVERPOOL HOSPITAL



**59 YEAR OLD FEMALE / SHOULDER
HEMI-ARTHROPLASTY**

How BodyFlow was used?

Measurements taken 15cm proximal and distal to elbow.
Body flow applied 1 day post-surgery.
Pads applied as per manufactures instruction.
4-5 sessions per day after home exercise programme.

What were the patient outcomes?

Good patient compliance reported.
2cm reduction post initial 20 min treatment at above
elbow measurement, maintained this reduction when
measured four days later. 2cm reduction noted at below
elbow measurement four days post start of trial.
Improvements plateaued at seven days post application
of BF unit.

Conclusion

Effective swelling management technique post shoulder
hemi-arthroplasty. Needs to be applied within 24-48hrs
post-surgery
swelling.

**31 YEAR OLD MALE / ACL RECONSTRUCTION
(HAMS GRAFT)**

Swelling leading to decreased quads activation and
therefore limitations of knee extension.

How BodyFlow was used?

Measurements taken at mid patella, 10cm proximal and
distal to the tib /fem joint line.
Body flow applied 5 days post-surgery as per the
consultant instruction.
Pads applied as per manufactures instruction.
4-5 sessions per day after home exercise programme.

What were the patient outcomes?

Good patient compliance reported.
1cm reduction noted after two days of treatment. Slight
improved quads activation.
2cm reduction after one week's treatment.
ROM (extension) improved by 5 degrees after one week.

Conclusion

Swelling reduction appeared to have positive impact on
ROM via improved VMO activation.

62 YEAR OLD MALE / TOTAL KNEE REPLACEMENT

Gross oedema supra patella area.

How BodyFlow was used?

Measurements taken at mid patella, 10cm proximal and
distal to the tib /fem joint line.
Body flow applied seven days post-surgery as per the
consultant instruction.
Pads applied as per manufactures instruction
4-5 sessions per day.

What were the patient outcomes?

Good patient compliance reported.
1cm reduction noted post initial 20 min BF treatment,
ROM increased 5 degrees post treatment.
3cm reduction within in one week.

Conclusion

Positive subjective feedback from patient regarding
improved comfort.
Swelling reduction appeared to have positive impact on
ROM.

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BODYFLOW CASE SERIES FEEDBACK / SPIRE SOUTHAMPTON HOSPITAL



54 YEAR OLD MALE / MEDIAL KNEE RESURFACING

ROM: (-5°, 70°) on D.O.D

Pain: 3-4/10 but 7-8/10 at night

How BodyFlow was used?

Measurements taken at 1cm above joint line, 10cm proximal and distal to joint line.

Body flow applied 10 days post-surgery as per physiotherapist advice.

Pads applied as per manufactures instruction.

4-5 sessions per day at random times with minimum 3 hours break between applications.

Dose: 20 mA.

What were the patient outcomes?

Good patient compliance reported

3 cm swelling reduction noted after 10 days of treatment.

ROM : 0°, 110°

Pain: 1-3/10

Conclusion

Swelling reduction appeared to have significant positive impact on ROM.

48 YEAR OLD MALE / LATERAL KNEE RESURFACING

ROM: (0°, 80°) on D.O.D.

Pain: 3/10

How BodyFlow was used?

Measurements taken at 1cm above joint line, 10cm proximal and distal to joint line.

Body flow applied 11 days post-surgery as per physiotherapist advice.

Pads applied as per manufactures instruction.

1-5 sessions per day at random times with minimum 3 hours break between applications.

For 5 days patient used Bodyflow only 1-5/day.

Patient did not use cold treatment.

Dose: 20-27 mA.

What were the patient outcomes?

Good patient compliance reported.

3-5 cm swelling reduction noted after 10 days of treatment. The 1 cm above joint line circumferential measurement - approximately 5cm less!

ROM: 10° improved flexion

Pain: 1-3/10.

Conclusion

Swelling reduction appeared to have positive impact on ROM. Significant reduction of swelling noted with high dose of current but low frequency of treatment.

75 YEAR OLD FEMALE / TOTAL KNEE REPLACEMENT

ROM: 0°, 80°

Pain: 1-3/10

How BodyFlow was used?

Measurements taken at 1cm above joint line, 10cm proximal and distal to joint line.

Body flow applied 10 days post-surgery as per physiotherapist advice.

Pads applied as per manufactures instruction.

3-6 sessions per day at random times with minimum 2 hours break between applications.

Dose: 10 mA.

What were the patient outcomes?

Good patient compliance reported.

1-5 cm swelling reduction noted after 10 days of treatment. 5cm less - 5cm proximally to the joint line.

ROM : 0°, 110°

Pain: 3-4/10

Conclusion

Significant swelling reduction and increased ROM noted, no change in pain level.

64 YEAR OLD MALE / MEDIAL KNEE RESURFACING

ROM: Not recorded

Pain: Not recorded.

How BodyFlow was used?

Measurements taken at 1cm above joint line, 10cm proximal and distal to joint line.

Body flow applied 10 days post-surgery as per physiotherapist advice.

Pads applied as per manufactures instruction.

2-5 sessions per day at random times with minimum 3 hours break between applications.

Dose: 18-19 mA.

What were the patient outcomes?

Good patient compliance reported.

2.5 - 4.5 cm swelling reduction noted after 10 days of treatment.

ROM : Not recorded

Pain: Not recorded

Conclusion

Significant swelling reduction noted, 4.5cm less – 1cm above the joint line

76 YEAR OLD MALE / PFJ KNEE RESURFACING

Limited knee extension (-5°) on D.O.D.

Pain: 1-3/10

How BodyFlow was used?

Measurements taken at 1cm above joint line, 10cm proximal and distal to joint line.

Body flow applied 11 days post-surgery as per physiotherapist advice.

Pads applied as per manufactures instruction.

4 sessions per day at random times with minimum 3 hours break between applications.

Dose: 12-20 mA.

What were the patient outcomes?

Good patient compliance reported

1.5 - 2.5 cm swelling reduction noted after 11 days of treatment. The proximal side (2.5cm less)

ROM: flexion improved by 15-20° degrees after 11 days

Conclusion

Swelling reduction appeared to have positive impact on ROM. Significant reduction of swelling noted with high dose of current but low frequency of treatment.

48 YEAR OLD MALE / MEDIAL KNEE RESURFACING

ROM: 0°, 90° on D.O.D

Pain: 1-3/10

How BodyFlow was used?

Measurements taken at 1cm above joint line, 10cm proximal and distal to joint line.

Body flow applied 10 days post-surgery as per physiotherapist advice.

Pads applied as per manufactures instruction.

3-6 sessions per day at random times with minimum 3 hours break between applications

Dose: 13-17 mA.

What were the patient outcomes?

Good patient compliance reported.

1-2.5 cm swelling reduction noted after 10 days of treatment. The distal side (2.5cm less).

ROM : no major change

Pain: 1-3/10

Conclusion

Swelling reduction appeared to have positive impact on ROM.