

Typical comparative examples.

Mr H (42 years old) and **Mrs P (80 years old)** both had cellulitis of the lower limb. **Mr H** is a diabetic with a history of hypertension. **Mrs P** has hypertension, a history of Deep Vein Thrombosis (2001) and large swollen legs.

Both **Mr H** and **Mrs P** had severe erythema, blistering and oedema associated with their cellulitis. Both were prescribed intravenous antibiotics, **Mr H**. 2gm Flucloxacillin and 1.2 gm Benzylpenicillin qds **Mrs P**. 500mg Flucloxacillin and 1.2 gm Benzylpenicillin qds.

Mrs P also had VIBRO-PULSE® three times a day for 30 minutes per treatment. **By DAY 3** there was a significant improvement with **Mrs P** erythema and the bright redness of the infection having reduced.

DAY 5 using VIBRO-PULSE® **Mrs P's** oedema had reduced. Ankle, calf and thigh circumference reducing from 28.5cm, 43cm and 58cm to 27cm, 41cm and 57cm. **Mrs P's** cellulitis had resolved, mobility had improved and she was discharged.

Mr H DAY 7 of antibiotic treatment alone, erythema had reduced by only 25%, the foot and ankle remained very swollen.

CONCLUSION: Mr H treated with intravenous antibiotics still had significant Cellulitis at **DAY 7**. **Mrs P** treated with antibiotics and VIBRO-PULSE® had cellulitis and oedema reduction and was discharged.

END of DAY 5.



Mrs P Before (1) and after (2) 3 days of antibiotic therapy and VIBRO-PULSE® Treatment. Mrs P fully recovered **DAY 5**.

Mr H Before (1) and after (2) 7 days of antibiotic therapy. cellulitis was still significant and the foot and ankle remained swollen.



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VIBRO-PULSE®: CELLULITIS & ERYSIPELAS TREATMENT.



“For Improved patient recovery and significantly reduced treatment time”.



“Offer you and your patients the best possible outcome”.



VIBRO-PULSE®: cellulitis and erysipelas treatment

- Reduces treatment time by up to 50%.
- Reduces the amount of antibiotics required for treatment.
- Reduces in hospital and home care treatment days to full recovery.

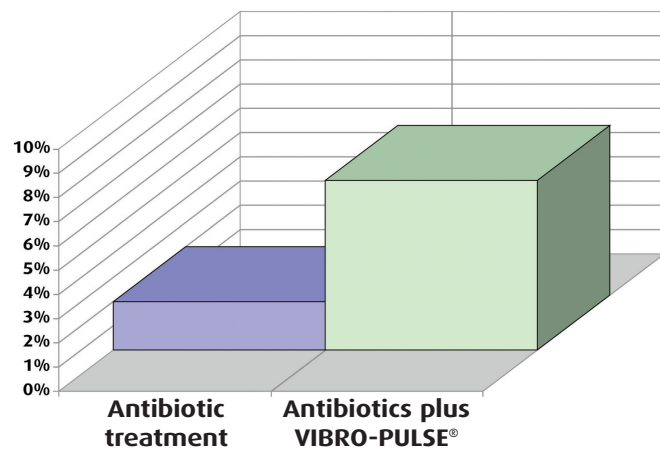
IV OR ORAL ANTIBIOTICS AND IMMOBILISATION ARE MOST COMMONLY USED TO TREAT CELLULITIS AND ERYSIPELAS OF THE LOWER LEG. HOWEVER MANY PATIENTS DUE TO THE COMBINED INFECTION AND OEDEMA CAN EXPERIENCE EXTENDED PERIODS OF TREATMENT, ON AVERAGE 8 TO 11 DAYS.

APPLYING VIBRO-PULSE® THERAPY TO THESE PATIENTS RESULTS IN A SIGNIFICANT REDUCTION IN THE TIME TAKEN FOR TREATMENT AND RECOVERY. IMPROVE THE OUTCOME OF ACTIVE TREATMENT FOR YOUR PATIENTS.

The VIBRO-PULSE® pad is placed under the leg. It generates a form of non invasive cycloidal/ 3 dimensional spiral vibration that is clinically proven to stimulate micro-circulation, blood flow and fluid dispersal in the tissue without using a compressive force.



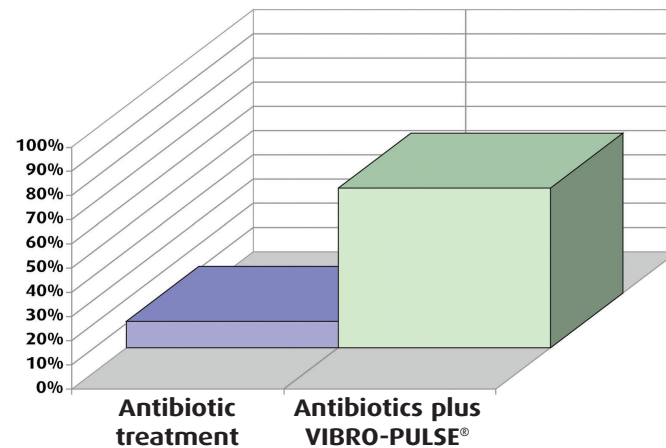
% mean reduction in limb circumference / oedema by day 7



VIBRO-PULSE®:

- Stimulates blood flow and micro-circulation in the skin enhancing the delivery and penetration of the intravenous and oral antibiotics to treat the infection
- Stimulates fluid turnover and the lymphatics within the skin tissue to reduce the oedema associated with the infection.

% of patients with 100% eythema / cellulitis reduction by day 7



Randomised controlled clinical trial results:

- Have shown a statistically significant reduction in treatment time.
- 67% of cellulitis patients fully recovered in an average of 5.6 days receiving ® and antibiotics.
- Compared to just 11% of cellulitis patients in an average of 6 days receiving antibiotics alone.

Table 3. Results of cost-analysis

| Cost of treatment | Standard treatment | Standard treatment plus cycloidal vibration |
|----------------------------------------------|---------------------|---------------------------------------------|
| Hospital bed day ²⁵ | £250 | £250 |
| Antibiotics | Average £10 per day | Average £10 per day |
| Average time for full recovery ²⁴ | 9.5 days | 5.5 days |
| Cycloidal vibration | £0 | £55 rental per patient |
| Total cost of treatment | £2470 | £1485 |
| NHS National Tariff cost ²⁶ | £2135 | £2135 |
| Cost saving per patient | (£335) | £650 |

REDUCE HOSPITAL BED DAYS. VIBRO-PULSE® IS THE ONLY CLINICALLY PROVEN TREATMENT TO SUCCESSFULLY REDUCE RECOVERY TIME BY UP TO 50%, A SIGNIFICANT COST SAVING FOR BOTH HOSPITAL AND COMMUNITY CARE.

Cellulitis / Erysipelas

Cellulitis is a very common skin infection resulting in over 50,000 hospital admissions for treatment in England per annum 2005/06 resulting in over 425,000 bed days.

Most commonly occurring in the lower leg it is characterised by local heat, redness, pain, swelling/ oedema and erythematous tissue. Streptococci and Staphylococcus aureus are the most common causes of the infection with potential entry sites being leg ulcers, toe-web maceration, a traumatic wound and tinea pedis. Other predisposing factors include leg oedema/ lymphoedema, peripheral vascular disease, diabetes and obesity.

Erysipelas and cellulitis are distinguished by the depth to which they penetrate tissue. Erysipelas is restricted to the dermis and superficial layers of the skin whilst cellulitis spreads deeper into the subcutaneous tissues.

How does VIBRO-PULSE® work?

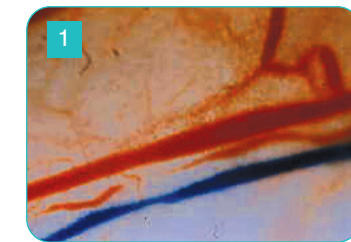
VIBRO-PULSE® is a unique 3 dimensional spiral/cycloidal vibration action that is clinically proven to increase micro-circulation within skin tissue. VIBRO-PULSE® increases localised vasodilation of the blood and lymphatic vessels, resulting in improved hydration of the epidermis and upper dermis and a reduction in oedema/swelling. While VIBRO-PULSE® is in progress, the relatively stiff tissue components transmit cycloidal vibration well, causing fluid to be pumped into and along the lymphatics, reducing tissue pressure and oedema.

The VIBRO-PULSE® pad is simple to use in both hospital and at home by the patient. It has been demonstrated that patients can use the treatment easily at home after simple instruction from their district nurse or carer.

Contra-indications – VIBRO-PULSE® therapy should not be used when one or more of the following clinical conditions are present. Acute deep vein thrombosis, active cancer (apart from final stage palliative treatment), pregnancy, acute thrombophlebitis, severe active rheumatoid arthritis, acute necrotizing fasciitis and severe osteoporosis.

References:

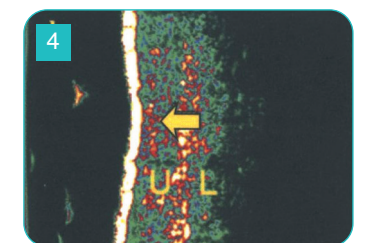
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Vascular and Lymphatic vessels.

1. Before VIBRO-PULSE®

2. After VIBRO-PULSE® Therapy



Dermascan Ultrasound echographic images of the leg.

3. Before VIBRO-PULSE®

4. Four weeks post VIBRO-PULSE® Therapy

U = upper dermis L = lower dermis. The → = low echographic pixels show oedema/swelling, demonstrating significant reduction after 4 weeks of VIBRO-PULSE® Therapy.

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