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.

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.

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

For more details please call 0114 224 2249
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Tel: + 44 (0) 114 2242249 Fax: + 44 (0) 114 2232300

VIBRO-PULSE®: CELLULITIS & ERYSIPELAS TREATMENT.

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

Vibropulse_4pp_A4  26/4/07  9:32 am  Page 1
**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 ERYSPIELAS 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, IMPROVING 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.

**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 tissue to reduce the oedema associated with the infection.

**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 erythremous tissue. Streptococcus 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 still 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 where 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 necrotising fasciitis and severe osteorroposis.

**Table 3. Results of cost-analysis**

<table>
<thead>
<tr>
<th>Cost of treatment</th>
<th>Standard treatment</th>
<th>Standard treatment + cycloidal vibration</th>
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<tbody>
<tr>
<td><strong>Hospital bed day</strong></td>
<td>£250</td>
<td>£290</td>
</tr>
<tr>
<td><strong>Antibiotics</strong></td>
<td>Average £10 per day</td>
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<td><strong>NHS National tariff cost</strong></td>
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<td><strong>Cost saving per patient</strong></td>
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**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 **VIBRO-PULSE®** and antibiotics.
- Compared to just 11% of cellulitis patients in an average of 6 days receiving antibiotics alone.

**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.**

**References:**

- Ryan, TJ, Theaker, AI, Tong, Y. *The effect of mechanical forces (vibration and external compression) on the dermal content of the upper dermis and epidermis assessed by high frequency ultrasound*. J Tiss Viab 2001; 11: 3, 97-101.

**Table 2. Cost saving per patient**

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