Appendix 5: Individual Patient Report 5: patient 5: female, 55 years old

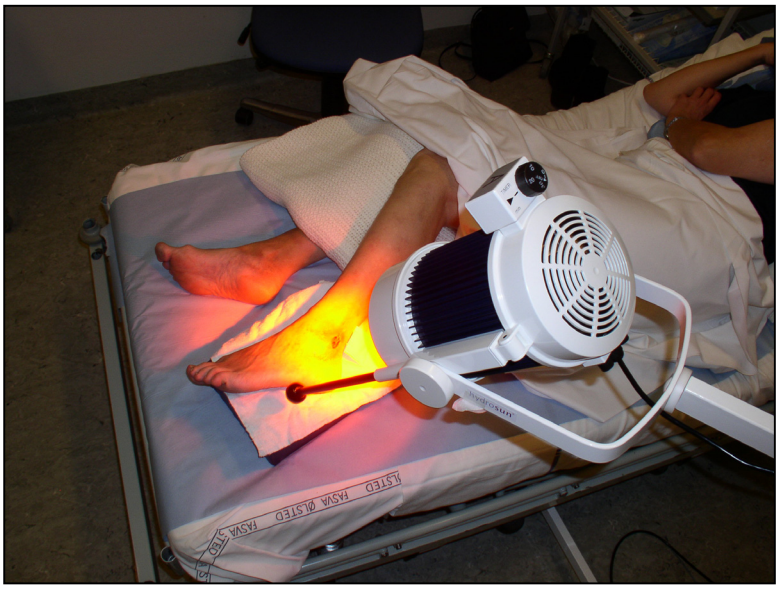
First visit October 24, 2002. The patient has had a leg ulcer some years previously. On arrival the patient had a single deep leg ulcer on the lateral malleolar region of the left leg. Area 242 mm^2. The ulcer first appeared approximately on April 2002. The ulcer steadily increased in size during the summer of that year. The patient was receiving penicillin treatment just before receiving her first wIRA treatment, which she felt had helped to stabilize the rate of increase in size of the ulcer. The patient has varicose veins (on both great and small saphenous veins) on the left leg. Patient lacked a compression garment therapy, as she did not tolerate any compression.
Ultrasound examination (Duplex scanning) confirmed superficial venous insufficiency with insufficient perforating veins of the lower left leg.
The patient was taking daily pain medication, 4–6 analgesic tablets per day. As treatment progressed the patient felt better and was sleeping better and was more active at home. During the course of 32 treatments the wound began to first decrease and later increase in size. However, the wound remained deep and finally began to increase in size again. The patient was receiving a standard dressing daily without compression. Towards end of treatment the patient visited a vascular specialist who recommended treatment with compression bandage. As our treatment did not seem to be successful it was decided to end the treatment and recommend that the patient changes to a conservative treatment with compression bandages. The ulcer had healed by March 2004. In August 2004 the patient underwent surgical intervention with stripping of the great saphenous vein and closure of insufficient perforating veins. In 2005 the patient was diagnosed as having moderate obstructive lung disease.

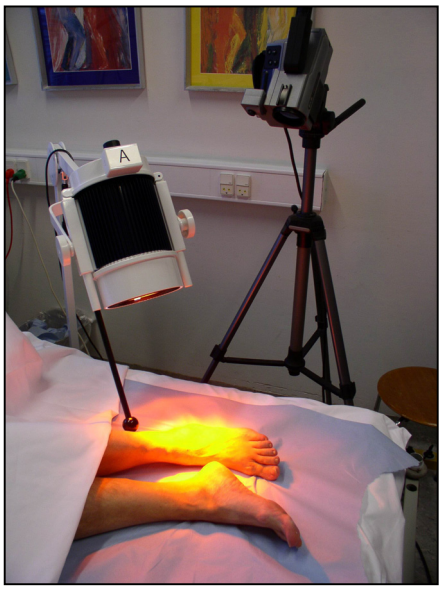
This ulcer is classified as a venous ulcer (v) (chronic venous insufficiency stage 3 according to Widmer, which means chronic venous insufficiency with ulcer) with a concomitant problem (lacking compression garment therapy) in Table 1 in the results section.

Comment: wIRA does not replace other sensible/necessary therapeutic procedures (such as compression garment therapy of chronic venous stasis ulcers of the lower legs) but complements them. It would have been appropriate to combine a compression garment therapy with a wIRA treatment (with uncovered ulcer during wIRA irradiation).

Total number of treatments:	32
First treatment:	2002-10-25
Last treatment:	2002-12-10
Total treatment period:	47 days

Appendix 5 to: Mercer JB, Nielsen SP, Hoffmann G. Improvement of wound healing by water-filtered infrared-A (wIRA) in patients with chronic venous stasis ulcers of the lower legs including evaluation using infrared thermography. GMS Ger Med Sci. 2008;6:Doc11. Online available from: http://www.egms.de/en/gms/2008-6/000056.shtml





Treatment set-up with wIRA radiator and infrared camera

2003-10-24: first visit (1 day prior to first treatment)
(The diameter of the red circles is 16 mm)

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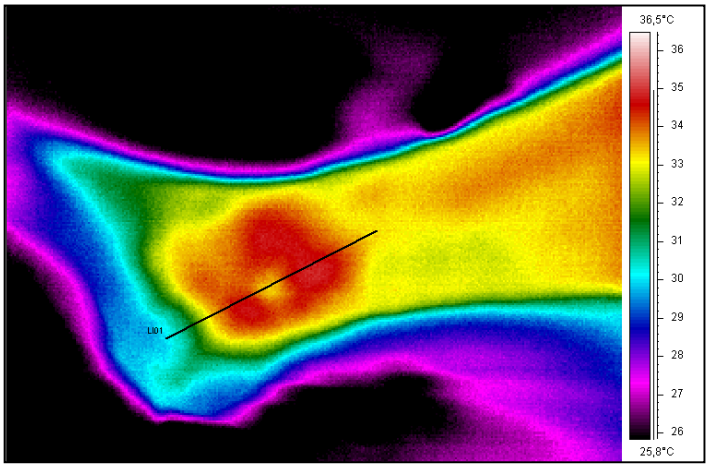
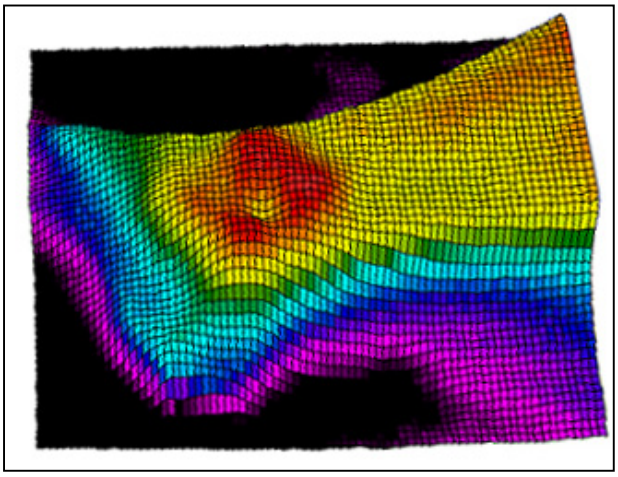
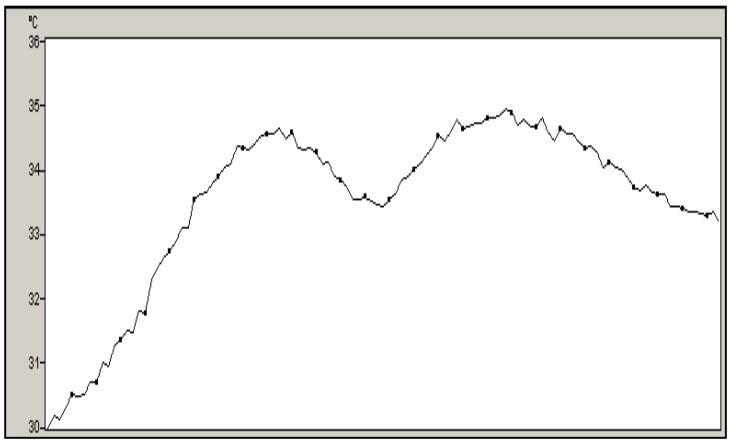
2002-10-24

2002-12-10

Infrared images of the ulcer







Temperature profile through the infrared image

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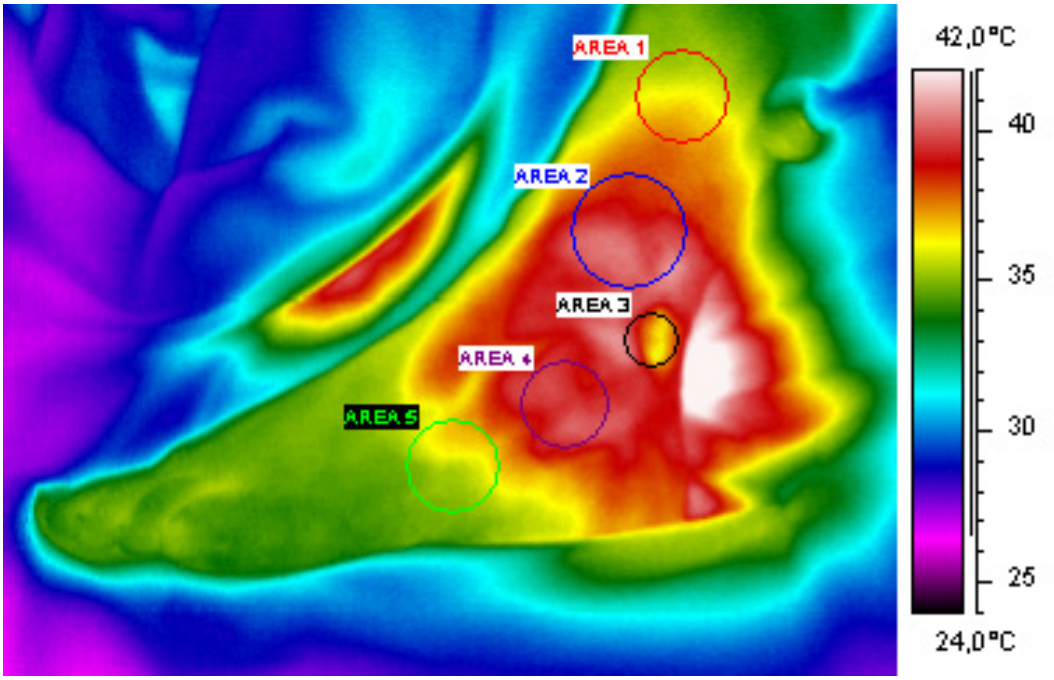
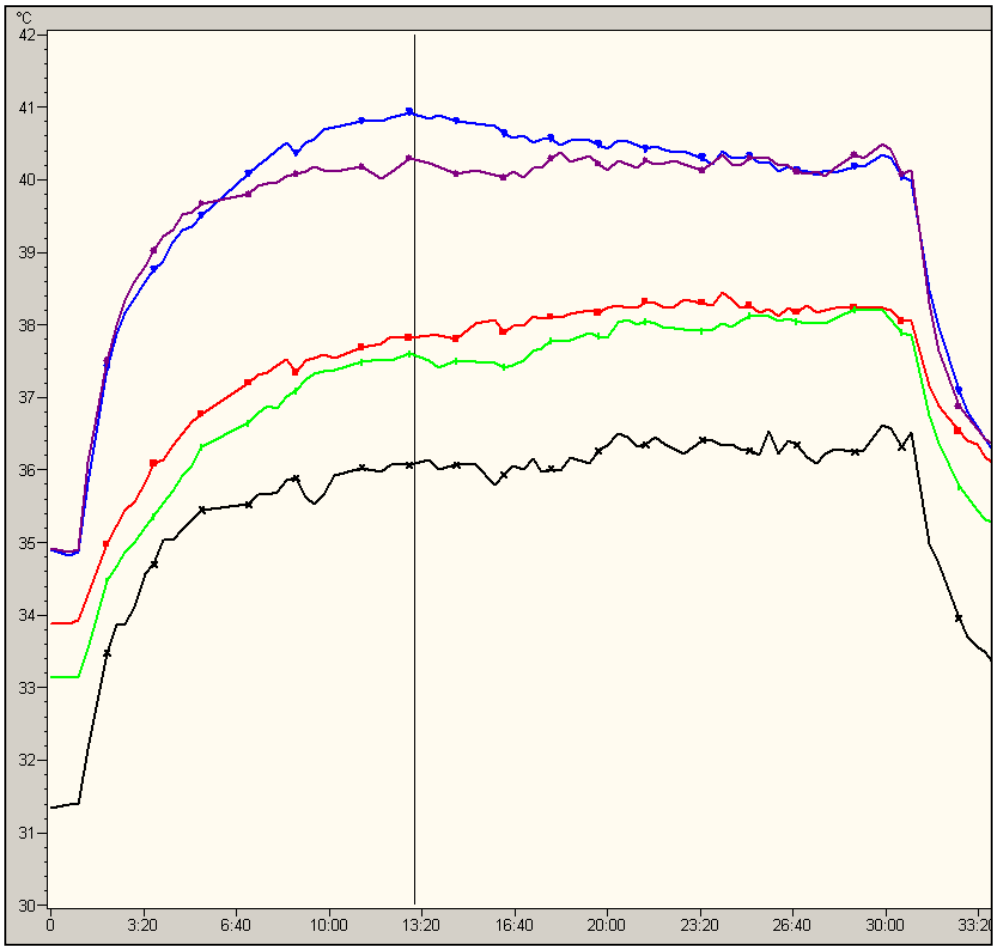
Skin temperature measurements during a 30-minute wIRA treatment.
The vertical line in the lower panel indicates the time point at which the infrared image in the upper panel was taken. For areas 1, 2, 4 and 5 values are maximum temperatures and for area 3 minimum temperature within each circular area.





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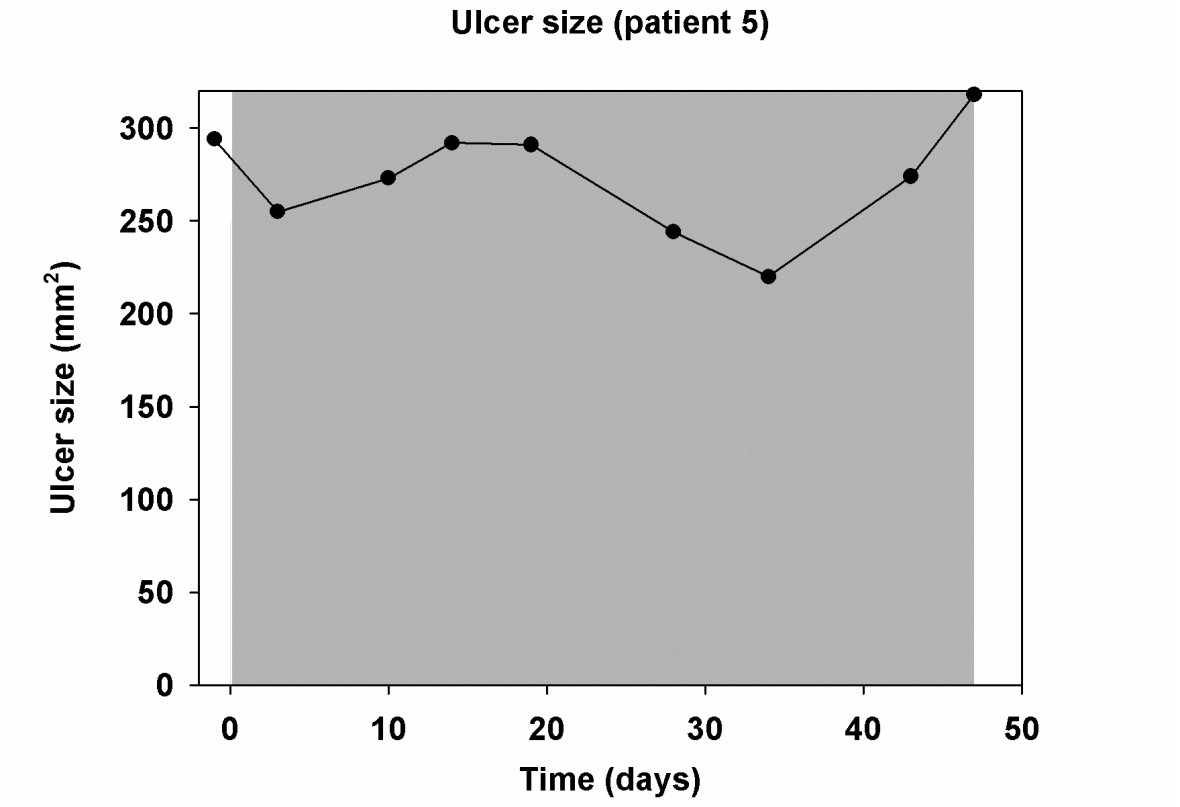
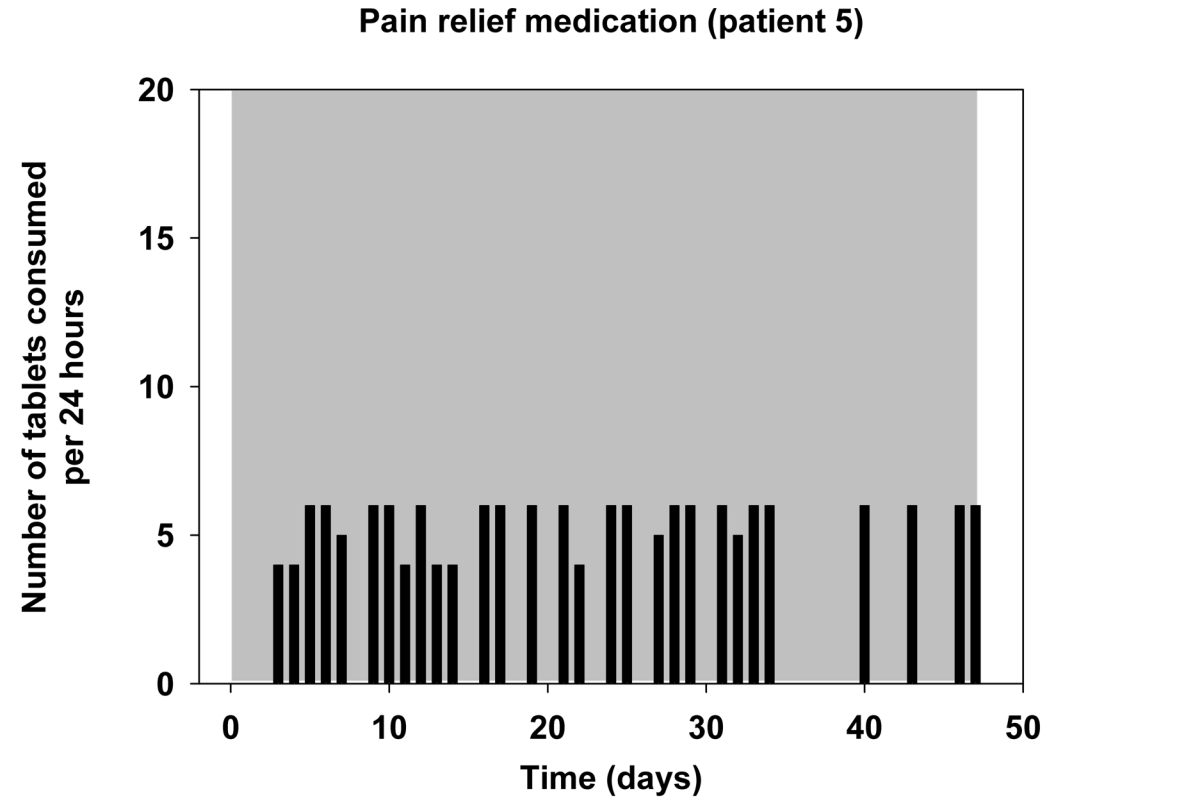
Note: In all following figures showing results related to time, the grey shaded area represents the entire wIRA treatment period for this patient (i.e., the total time period between the first and the last treatment).





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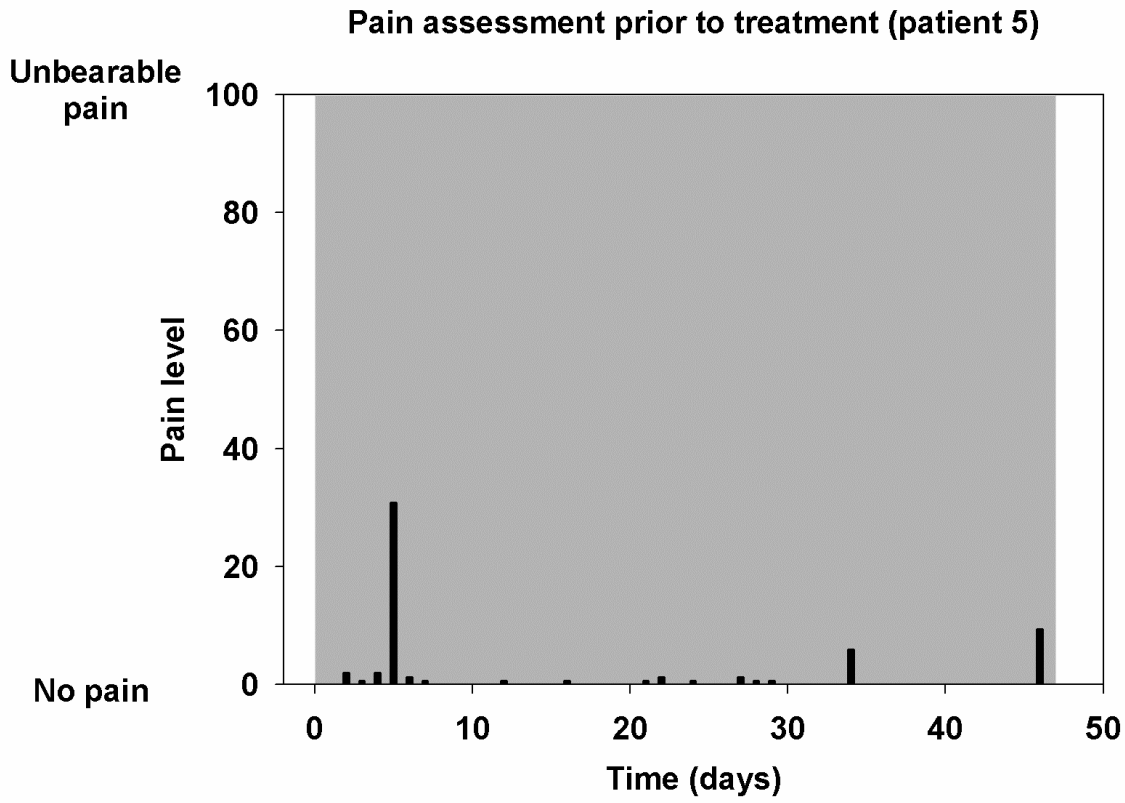

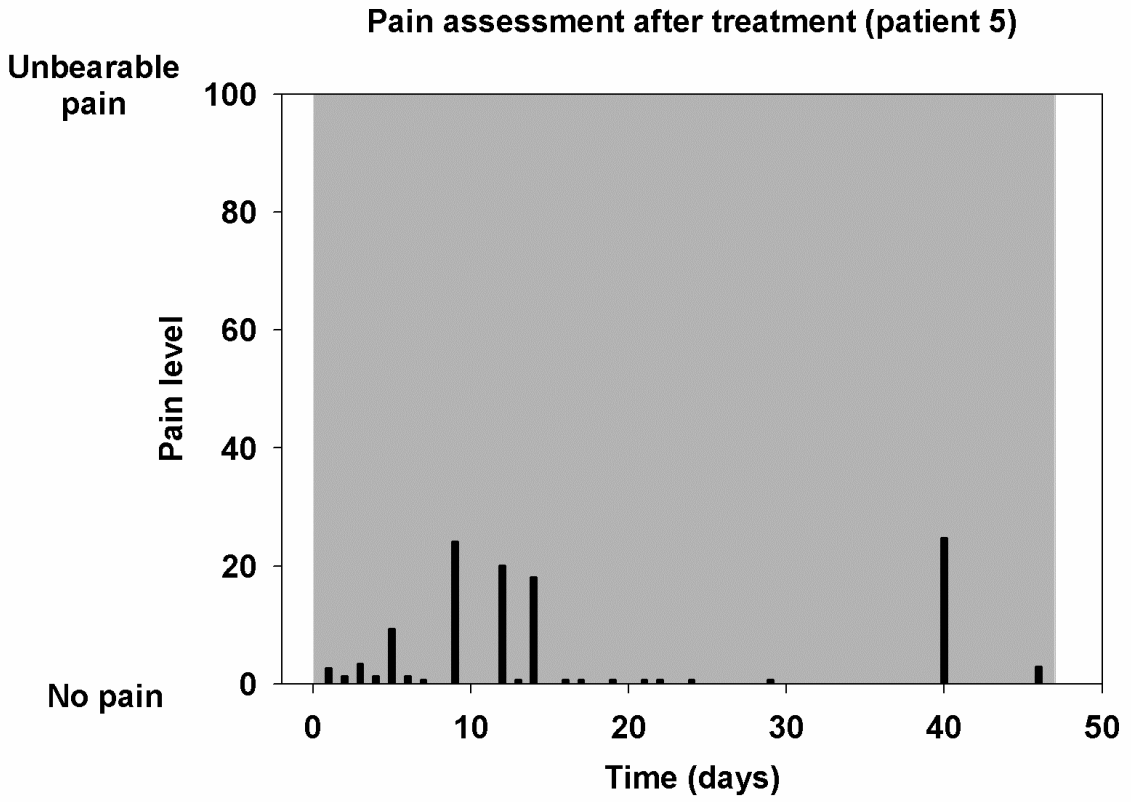

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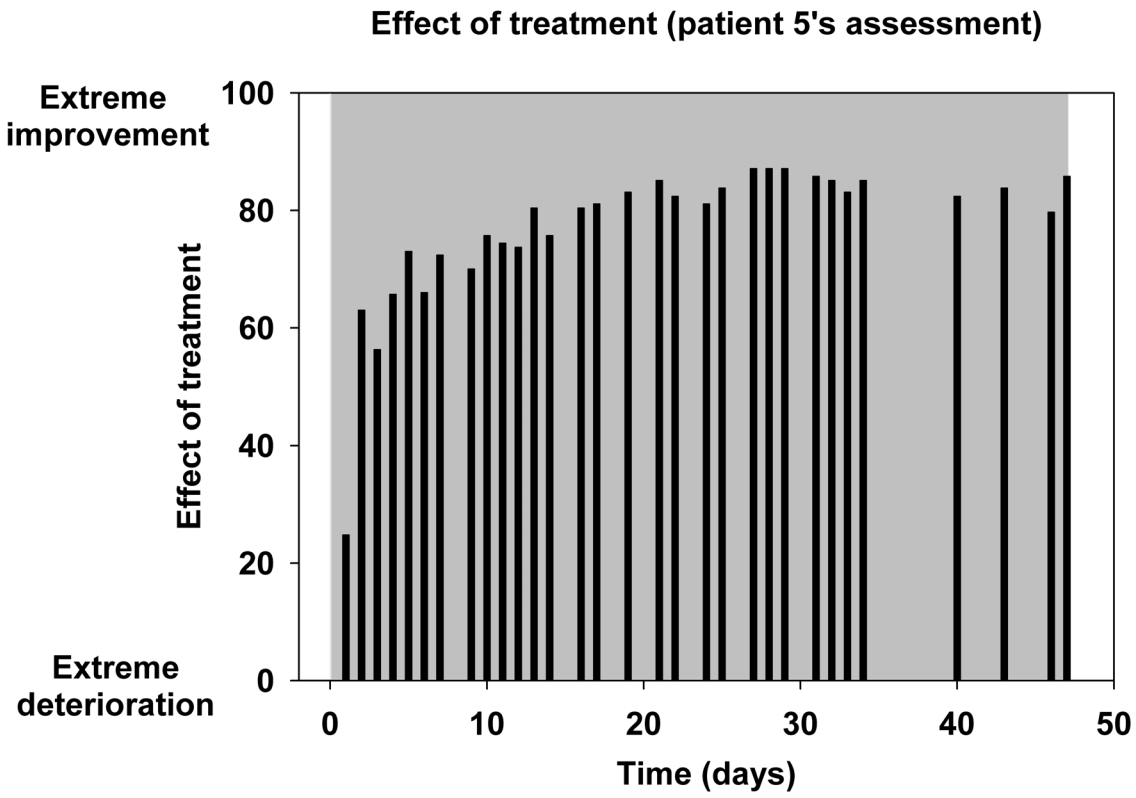

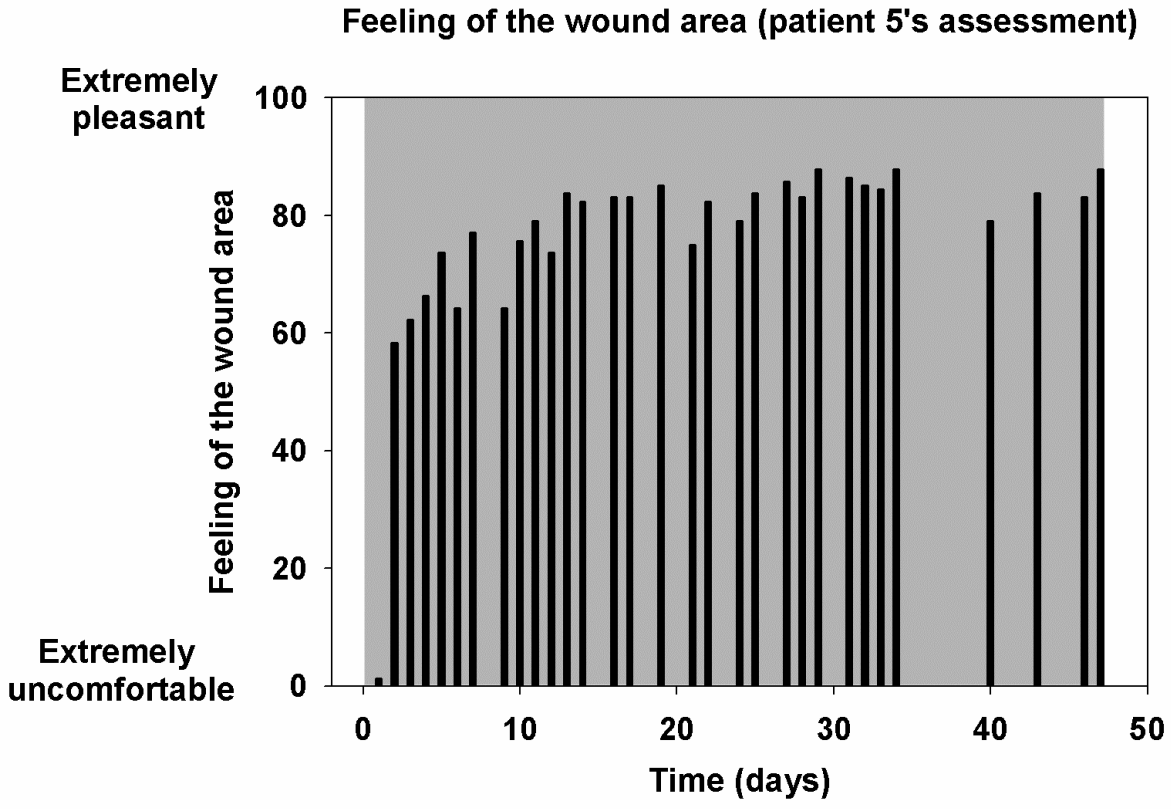

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