CASE STUDIES

The following case studies represent the work of Dr. William Amalu during the period beginning November 2004 through May 2005. The six studies shown are a sampling of over 30 studies Dr. Amalu has completed. They demonstrate the dramatic and rapid improvement of inflammation, pain reduction, increased range of motion, restoration of function, and improved sleep. Some patients have experienced improvement in just one treatment. Ongoing improvement has been and continues to be seen in patients over weeks and even months.

Case Study #1 – 49 year old female

The thermographic images below show the dramatic improvement in circulation and significant response to decreased pain after only 4 nights sleeping on the Electron Transfer Technology sleep system

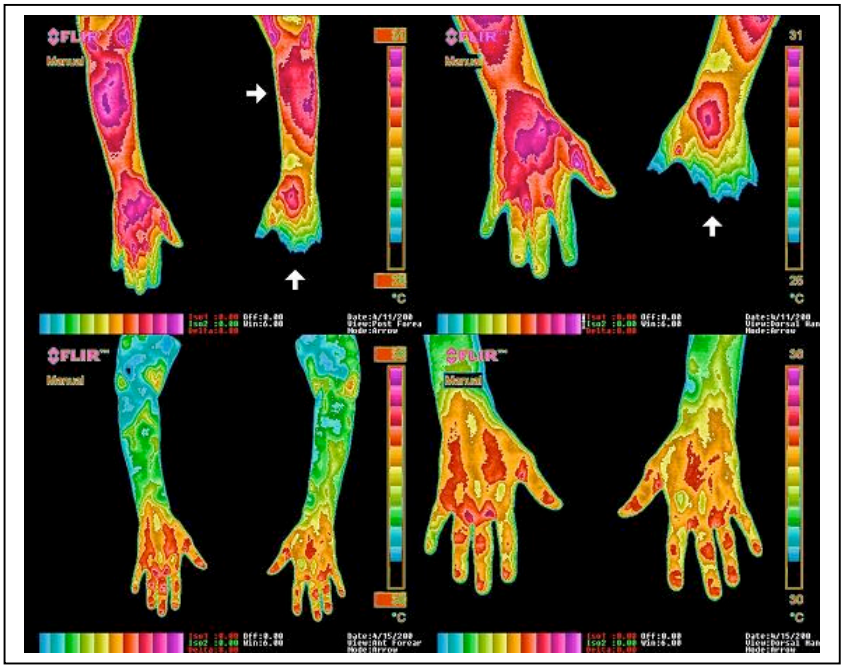
The case presented below was taken from a randomized clinical controlled study. Each subject was provided with an Electron Transfer Technology sleep system (ETT) on 4-11-05 and observed for changes with clinical visits every 48 hours for 5 days. Progress was monitored with High-Resolution Medical Infrared Imaging and standardized clinical outcome assessment questionnaires (quadruple visual analogue pain scales and sleep).

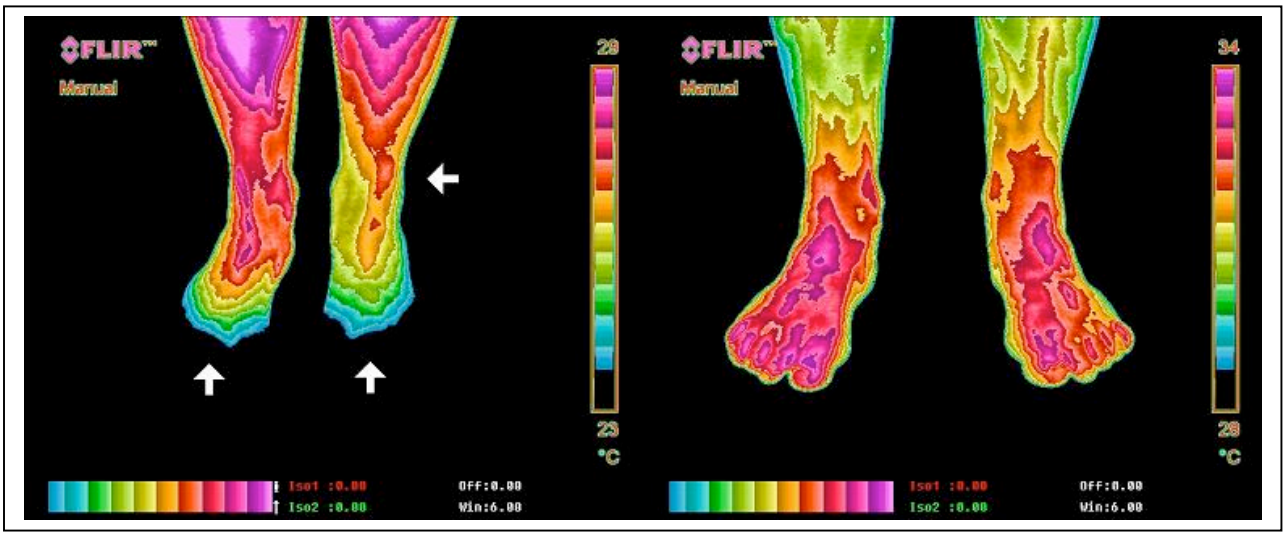
The patient in this study presented on 4-11-05 as a 49 year old female with the following complaints: chronic neck and upper back pain, pain interfering with sleep, lack of sleep interfering with daily functioning, leg achiness/restless legs during sleep, and waking stiff and sore. The patient had previously tried medical and alternative treatments with poor results.

On 4-15-05, after 4 nights of sleeping on the ETT system, the patient reported a 67.5% reduction in pain, a 42.9% reduction in a lack of sleep interfering with daily functioning, a 28.6% reduction in pain interfering with sleep, a 75% reduction in leg achiness/restless legs during sleep, and an 80% reduction in waking stiff and sore. Steady continued improvement was reported by the patient on a 5-31-05 follow-up.

Her infrared images show a significant change with a pronounced improvement in circulation in the left upper extremity and both lower extremities. The images below show the significant changes from the baseline images taken on 4-11-05 (before ETT use) to the final images taken on 4-15-05 after 4 nights of sleeping on the ETT system.

The top row images are of the upper extremities taken as a baseline on 4-11-05 (prior to ETT use). The arrows denote the areas of poor circulation. The temperature of the left hand is so low that the fingers are at the same temperature as the room and cannot be seen (thermal amputation). The bottom row images were taken on 4-15-05 after 4 nights of sleeping on the ETT system. Note the significant improvement in circulation with a return of normal thermal symmetry in both upper extremities.





The above image on the left is of the lower extremities taken as a baseline on 4-11-05 (prior to ETT use). The arrows denote the areas of poor circulation. The temperature of both feet are so low, especially the left, that the toes are at the same temperature as the room and cannot be seen (thermal amputation). The image on the right was taken on 4-15-05, after 4 nights of sleeping on the ETT system. Note the significant improvement in circulation with a return of normal thermal symmetry in both feet.

Case Study #2 – 65 year old female

The thermographic images below show the dramatic reduction in inflammation that resulted in near complete alleviation from pain after only 4 nights sleeping on the Electron Transfer Technology sleep system

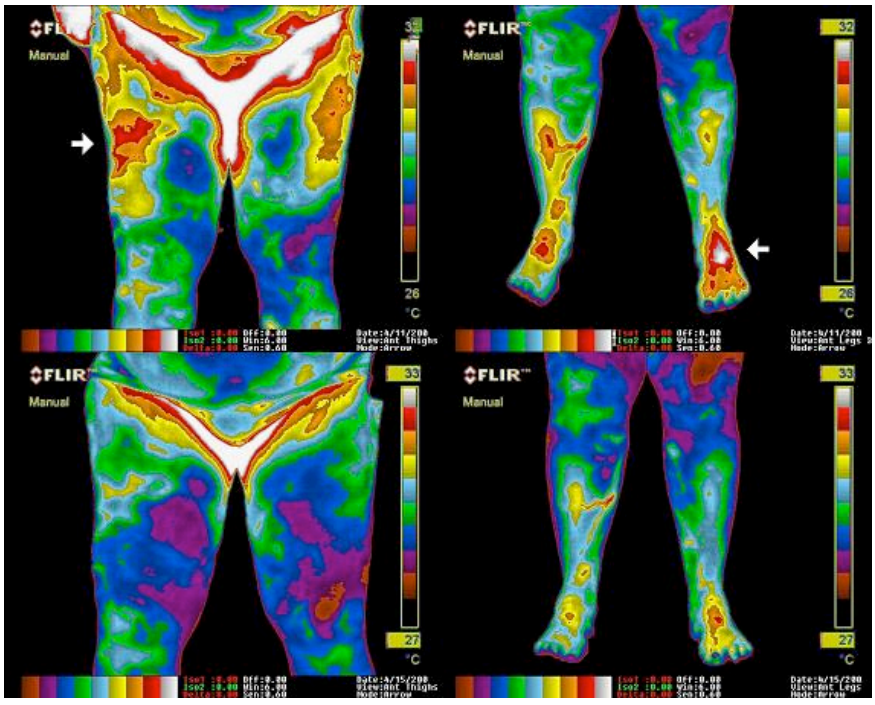
The case presented below was taken from a randomized clinical controlled study. Each subject was provided with an Electron Transfer Technology sleep system (ETT) on 4-11-05 and observed for changes with clinical visits every 48 hours for 5 days. Progress was monitored with High-Resolution Medical Infrared Imaging and standardized clinical outcome assessment questionnaires (quadruple visual analogue pain scales and sleep).

The patient in this study presented on 4-11-05 as a 65 year old female with the following complaints: chronic bilateral thigh pain increased on the right to include the hip area, right knee pain and catching, bilateral ankle and foot pain with swelling increased on the left, insomnia, non-restful sleep, lack of sleep interfering with daily functioning, sleepiness during the day, pain interfering with sleep, leg achiness during sleep, and waking stiff and sore. The patient has been on prolonged medical treatment with poor results.

On 4-15-05, after 4 nights of sleeping on the ETT system, the patient reported a 91.6% reduction in pain, 50% improvement in restful sleep, 50% reduction in insomnia, a 50% reduction in a lack of sleep interfering with daily functioning, 50% reduction in sleepiness during the day, an 81% reduction in pain interfering with sleep, 50% reduction in leg achiness during sleep, and a 50% reduction in waking stiff and sore. The patient reports steady continued improvement as of a 5-31-05 follow-up.

Her infrared images show a significant change with a pronounced improvement in inflammation in the right upper thigh/hip region and both ankles/feet especially on the left. The images below show the significant changes from the baseline images taken on 4-11-05 (before ETT use) to the final images taken on 4-15-05 after 4 nights of sleeping on the ETT system.

The top row images are of the lower extremities taken as a baseline on 4-11-05 (prior to ETT use). The arrows denote the most significant areas of inflammation, which correspond precisely with the subject's areas of complaint. The bottom row images were taken on 4-15-05 after 4 nights of sleeping on the ETT system. Note the significant reduction in inflammation and a return towards normal thermal symmetry.



Case Study #3 – 85 year old male

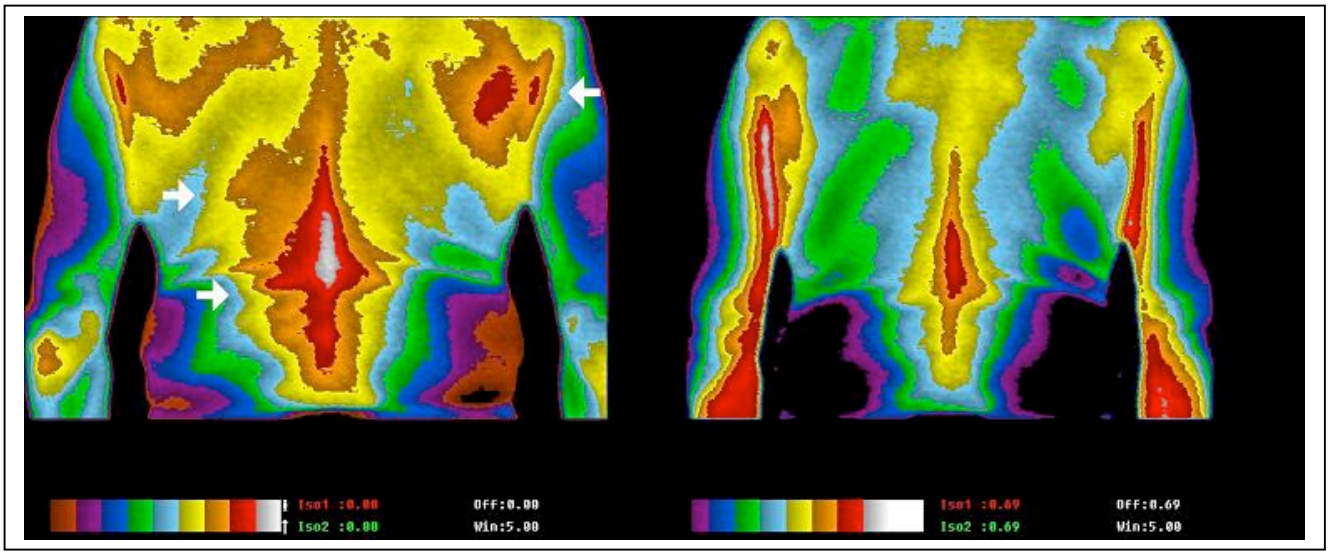
The thermographic images below show the dramatic reduction in inflammation that resulted in significant pain resolution after only 2 nights sleeping on the Electron Transfer Technology sleep system

The case presented below was taken from a randomized clinical controlled study. The subject was provided with an Electron Transfer Technology sleep system (ETT) on 8-9-04 and observed for changes with occasional follow up clinical visits over an 8 week period. Progress was monitored with High-Resolution Medical Infrared Imaging and standardized clinical outcome assessment questionnaires (quadruple visual analogue pain scales and sleep).

The patient in this study presented on 8-9-04 as a 85 year old male with significant chronic left low back pain, chronic recurring right shoulder pain, pain interfering with sleep, and waking stiff and sore over a 4 month period. The patient had been on prolonged medical treatment with poor results.

On 8-11-04, after 2 nights of sleeping on the ETT system, the patient reported a 50% reduction in pain, an 80% reduction in pain interfering with sleep, and a 75% reduction in waking stiff and sore. After using the ETT sleep system for 4 weeks, the patient reported total resolution of his back and shoulder pain with only occasional mild stiffness. At this time the patient commented that "I have my life back".

His infrared images show a significant change with a pronounced improvement in inflammation in the left lower back and right shoulder region. The images below demonstrate the significant changes from the baseline images taken on 8-9-04 (before ETT use) to the final images taken on 8-11-04 after 2 nights of sleeping on the ETT sleep system.



The image on the left is of the low back and shoulders taken as a baseline on 8-9-04 (prior to ETT use). The arrows denote the most significant areas of inflammation, which also correspond precisely with the subject's areas of complaint. The image on the right was taken on 8-11-04 after 2 nights of sleeping on the ETT sleep system. Note the complete resolution in inflammation with a return of normal thermal symmetry.

Case Study #4 – 48 year old female

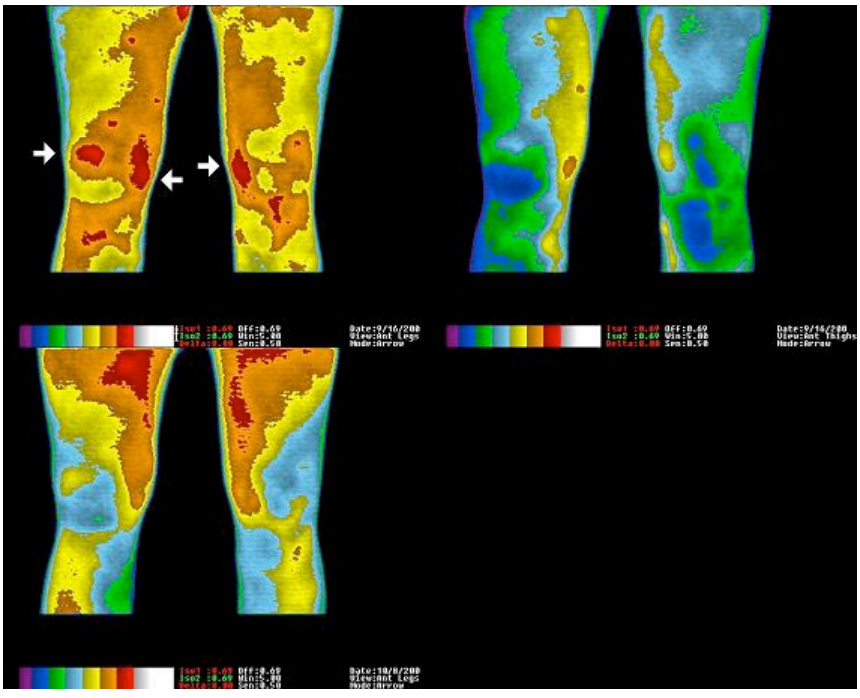
The thermographic images below show a dramatic reduction in 6 years of chronic inflammation after only 30 minutes exposure to Electron Transfer Technology

The case presented below was taken from a randomized clinical controlled study. The subject was exposed to clinical Electron Transfer Technology (ETT) on 9-16-04 and observed for changes 30 minutes later and followed up with clinical visits over a 12 week period. Progress was monitored with High-Resolution Medical Infrared Imaging and standardized clinical outcome assessment questionnaires (quadruple visual analogue pain scales).

The patient in this study presented on 9-16-04 as a totally disabled 48 year old female with significant chronic bilateral knee pain (increased on the right), swollen knees, and fatigue over the past 6 years. The subject's condition began as a result of an injury sustained while using a ladder. The patient had received 3 knee surgeries, prolonged medical treatment, and physical therapy with poor results. The patient presented with knee wrap supports, a pronounced limp, and the need for a walker in order to ambulate.

On 9-16-04, after 30 minutes of exposure to clinical ETT, the patient reported a 20% reduction in pain that lasted for 24 hours. After 5 days of clinical ETT, the patient reported a 30% reduction in pain with an increase in energy that she described as "almost back to my normal self." After 2 weeks of treatment the patient felt good enough to try dancing and reported no increase in symptoms afterward. By 3 weeks the patient no longer needed her walker. After 6 weeks of treatment the patient's limp resolved. At week 12 the subject reported an overall 90% reduction in pain and swelling and noted that "I can't believe I have my life back."

Her infrared images show a significant change with a pronounced improvement in inflammation in both knees. The images agree with the patient's statement that her symptoms are worse on the right.



The top row of images is of the knees taken before and after 30 minutes exposure to clinical Earthing on 9-16-04. The arrows denote the most significant areas of inflammation. Note the considerable reduction in inflammation in the right image taken after 30 minutes of exposure to clinical ETT. The image on the bottom left was taken on 10-8-04 before treatment. The image shows a return of normal thermal symmetry with significant reduction in inflammation.

Case Study #5 – 33 year old female

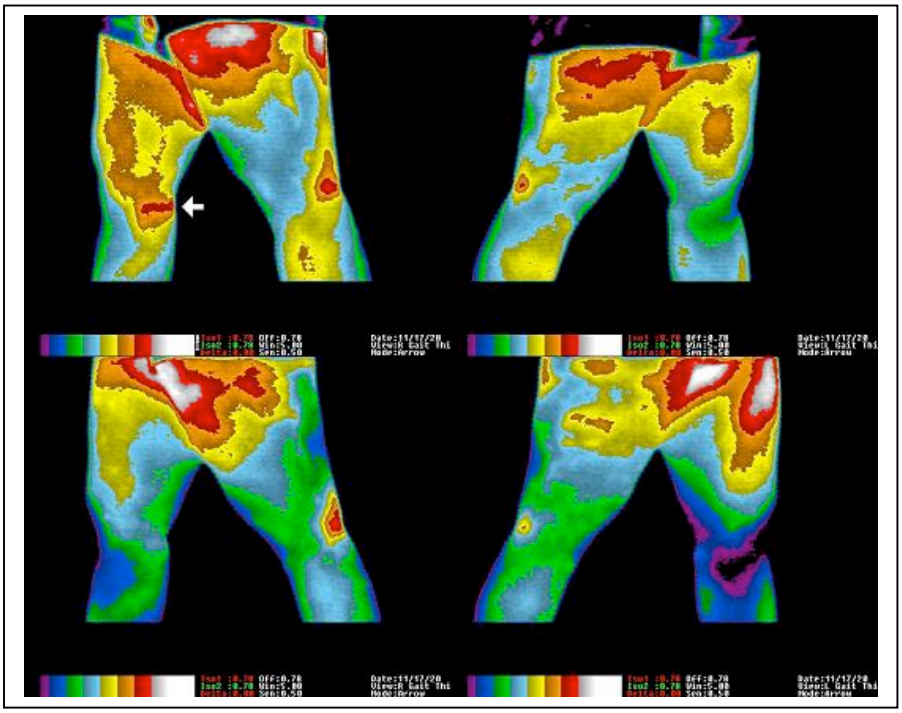
The thermographic images below show a dramatic reduction in 18 years of chronic inflammation after only 30 minutes exposure to Electron Transfer Technology

The case presented below was taken from a randomized clinical controlled study. The subject was exposed to clinical Electron Transfer Technology (ETT) on 11-17-04 and observed for changes 30 minutes later and followed up with clinical treatment over a 12 week period. Progress was monitored with High-Resolution Medical Infrared Imaging and standardized clinical outcome assessment questionnaires (quadruple VAS).

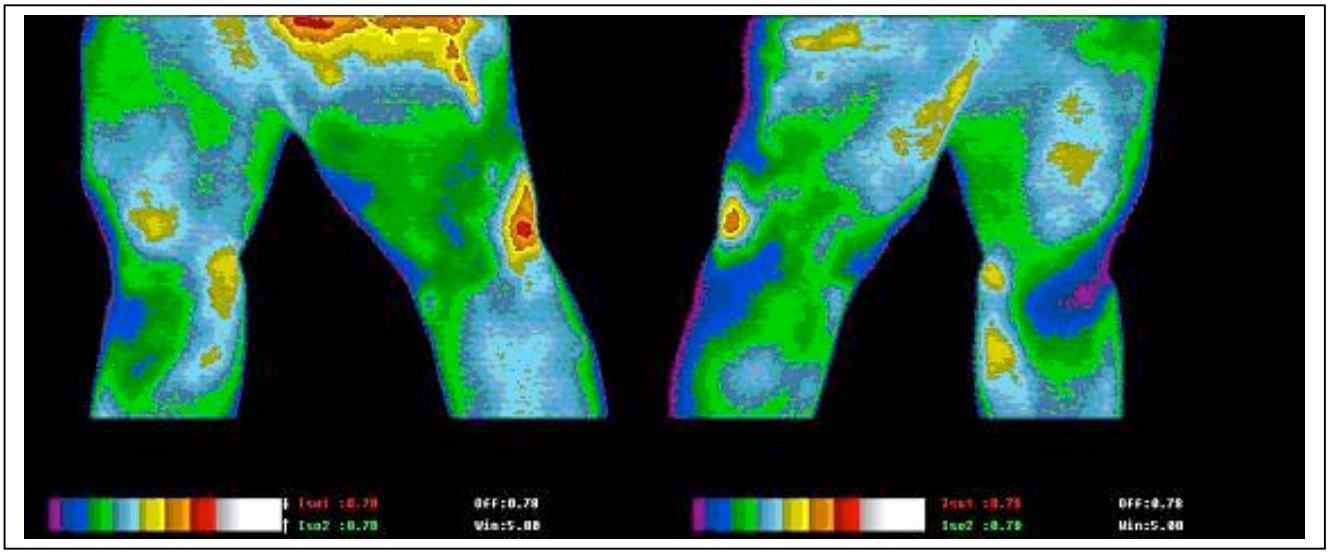
The patient in this study presented on 11-17-04 as a 33 year old female with significant chronic right medial knee pain with swelling and instability over the past 18 years. The subject's condition began as a result of a gymnastics injury at the age of 15. The patient reported that she was unable to stand for long periods and that simple actions such as driving increased the symptoms. She also noted that she needed to sleep with a pillow between her knees to decrease the pain. The patient had been undergoing medical treatment and physical therapy on and off for many years with minimal results. The patient presented with considerable right medial knee tenderness and a mild limp.

On 11-17-04, after 30 minutes of exposure to clinical ETT, the patient reported a mild reduction in pain. After 6 days of clinical ETT, the patient noted a 50% reduction in pain. She also advised that she could stand for longer periods without pain and that she no longer needed a pillow between her legs when she slept. After 4 weeks of treatment the patient felt good enough to play soccer, and for the first time in 15 years she felt no instability and little pain. By 12 weeks, the subject reported an 87% reduction in pain, no swelling, and for the first time in 15 years she went waterskiing. The patient contacted the office on 5-23-05 to report that she had finished a half-marathon, something she never dreamt she would ever be able to do.

Her infrared images show a significant change with a pronounced improvement in inflammation in the right knee. The images correlate precisely with the area of chronic pain.



11-17-04: The top row of images is of the knees taken in the walking position exposing the inside of both knees. The arrow points to the exact location of the patient's pain and denotes a significant area of inflammation. Note the considerable reduction in inflammation in the bottom row of image taken after 30 minutes of exposure to clinical ETT.



The above image was taken before treatment on 11-24-04. The image shows a near normal return of thermal symmetry with a significant reduction in inflammation in the right medial knee area.

The photo on the left is of the patient as she crosses the finish line. After 18 years of chronic knee pain, she has recovered to race and finish a half-marathon.

Case Study #6 – 84 year old female

The forensic photos below show dramatic accelerated healing of an 8 month old open wound after only 2 weeks exposure to Electron Transfer Technology

The case presented below was taken from a randomized clinical controlled study. The subject was initially exposed to clinical Electron Transfer Technology (ETT) on 10-29-04 and followed up with daily 30 minute clinical ETT treatments over a 2 week period. Progress was monitored with forensic photography and standardized clinical outcome assessment questionnaires (quadruple visual analogue pain scales).

The patient in this study presented on 10-29-04 as an 84 year old female with an 8 month old unhealed open wound on the left ankle with pain in the same region. The subject's condition began as a result of a poorly fitted boot. A few hours after wearing the boot, a blister formed on the lateral aspect of the left ankle in the region of the inferior lateral malleolus. The blister formed into an open wound that resisted healing. The patient had been undergoing various types of treatment at a specialized wound center with no results. Vascular imaging of the patient's lower extremities revealed significant compromise to the arterial circulation of the left lower leg. The patient presented to our center with a mild limp and in pain.

On 10-29-04, after 30 minutes of exposure to clinical ETT, the patient reported a noticeable decrease in pain. After 1 week of daily clinical ETT, the patient noted an 80% reduction in pain. The patient also showed no evidence of a limp at this time. The patient reported that she was completely pain fee by the end of week 2.

Her forensic photographs show a dramatic change with a significant amount of healing after the first week of exposure to clinical ETT. By the end of the second week, the wound was healed over and the color of the leg showed a significant improvement in circulation.

The forensic photographs shown above were taken as a baseline on 10-29-04. Note the size and depth of the open wound and how it has extended to include the surrounding tissue. The pale-gray color of the entire lower leg is evidence to the patient's vascular imaging that shows poor arterial circulation.






The top row of photographs was taken as a baseline on 10-29-04. Note the unhealed open wound and pale-gray color of the skin. The second row of photographs was taken after 1 week of daily exposure to clinical ETT. Note the significant level of healing and improvement in circulation (skin color) after only 1 week. The bottom row of photographs was taken on 11-10-04 after 2 weeks of daily clinical ETT. Note that the wound has healed over and that the patient's circulation has dramatically improved.