

## Does Reflexology Improve the “Quality of Life” for Lung Cancer Patients?

Subject's Age: 70

Subject's Occupation: retired bank executive

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Cancer is a generalized term for a group of over 100 diseases that can form or grow from cells in any part of the body. Various factors are involved in triggering normal cells to lose control and become cancerous. As cancers form they are identified in relation to the tissues in which they develop. Breast, lung, pancreatic and colon cancers are examples of just a few. The effects of cancer and the treatments for it can be devastating. Different types of cancers grow at different rates and respond to treatments differently.

There are several forms of conventional medical treatments available for cancer. These treatments are usually accompanied with severe side effects. Often, medications prescribed to alleviate the side effects of the medical treatment have side effects as well.

### Current Research

Immune Recovery and Wellness, P.C. (IRW@immuneclinic.com) reports on a study performed at Stobhill Hospital, Glasgow comprised of a group of cancer patients with various tumor types. The study was designed for patients in the palliative stage of cancer. Divided into two groups, both received a series of treatments. One group received placebo treatments and the other received reflexology. Both groups completed a self-assessment scale relating to “quality of life” prior to and after treatment. Both reported improvement. However, the reflexology group reported a greater benefit than that of the placebo group.

A Reflexology Research Project was compiled by Indiana University, Purdue University Indianapolis Reflexology Program reflexologists in September 2007. This project gathered information from various resources in an effort to examine results reported using reflexology on a variety of health conditions. Among the projects reported was one conducted by the School of Nursing at East Carolina University, Greenville NC. This study focused on pain/anxiety relief for breast/lung cancer patients. A group of patients received a series of reflexology treatments by certified reflexologists (with no changes to the patients' medications) and all reported a significant decrease in anxiety after their sessions.

## **The Subject**

The subject is a 70 year old female lung cancer patient diagnosed with stage 4 lung cancer, who has endured both chemotherapy and radiation therapy, and is currently preparing to have surgery. She has a heart condition for which she is prescribed three medications.

The subject has led a very active lifestyle, is a highly educated, retired bank executive. When diagnosed, she decided she would, as she does with all life situations, adopt a "positive mental attitude" in an effort to support her healing process. She has never received reflexology treatments.

The first phase of treatment was an aggressive round of chemotherapy. The subject reports no pain, nausea or vomiting as a result. The subject claims that she blocks out pain, and simply doesn't experience it, and doesn't take any sort of prescription or over the counter medication for pain, nausea or vomiting. One side effect that she did report was full loss of all of her hair almost immediately. She also reported a burning sensation throughout her entire body from which she is still recovering. The physical evidence of the burning is a blotchy, reddish, discoloration of the skin. She also reported that she was incredibly tired and sleepy while undergoing chemotherapy. Even on good days she stated that a nap was in order and oftentimes, more than one.

The second phase of treatment was 30 rounds of radiation therapy, the last one being just days after the first reflexology session of this study. Subject still reports no pain, nausea, or vomiting during treatment. Her greatest complaint is that she feels that she has to be constantly on the move. She has difficulty just sitting down to relax or to simply feel relaxed in general. Some of the activities that she takes part in on a daily basis, in an effort to work off the feeling of restlessness and to remain on the move are gardening, re-arranging furniture, cleaning house, (on the level of "spring" cleaning) shopping and dining out with friends. She feels as though she has to keep going and says she just can't stop and relax. Sleep is somewhat restless and intermittent. What she desperately would like to achieve at this point is to be able to relax. This would be one key to improve her "quality of life".

## **The Study**

Reflexology is the only modality to be used. All techniques, stretching and relaxation exercises were arranged in a specific order to be used thereafter as the model for the entire study. Weekly one-hour reflexology sessions to be conducted five consecutive Thursdays at 8AM will run from January 8 to

February 5, 2009. Subject will complete a daily assessment log to track progress.

The following guideline was designed to accommodate an assessment scale to be completed prior to the first session and then to be used as a daily log by the subject. Case report guidelines will be sent with the subject weekly and returned to the therapist on a weekly basis prior to sessions.

**Case Study Report/Log Guidelines:**

#1-4 completed within 30 minutes of rising.

#5&6 completed within 30 minutes prior to bedtime.

1. Time to bed
2. Time to rise
3. Quality of sleep (restful or intermittent/interrupted)
4. You feel now (rested or tired)
5. Rate the following; 0-10 (0 if not presenting with a problem, 1-3 mild, 4-6 moderate, 7-10 severe)  
Anxiety  
Pain  
Nausea  
Depression  
Stress Level  
Fatigue  
Relaxation (ability to relax graded as 1-10 least to most)  
Level of energy - How exhausted are you? (1-5 least to most) *or*  
How energized are you? (6-10 least to most)
6. Medications taken today

**Initial Check In: (subject's first day report prior to first session)**

1. Time to bed – 10:00 P.M.
2. Time to rise – 6:00 A.M.
3. Quality of sleep – intermittent/interrupted
4. You feel now – rested
5. Rate the following:  
Anxiety - 0  
Pain - 0  
Nausea - 0  
Depression - 0  
Stress Level - 0  
Fatigue - 0  
Relaxation – 4  
Level of energy - 10.

6. Medications – Toprol 25 mg. once/day, Digoxin .25 mg. once/day and Coumadin 5 mg. once/day

Session one:

At the onset of this session, I observed, that there seemed to be a great deal of tension in the subject's muscles and resistance to range-of-motion and stretching techniques. The subject at times reacted in anticipation and would move her foot in the direction in which she thought it was going to be moved. Throughout most of the session the subject was very conversational. Nearing the end of the session, she became less conversational and was a little less resistant to the techniques.

When the session was complete, her comment was, "I'm surprised that my whole body can get so relaxed from you working on my feet." Subject acknowledged that it was difficult to allow passive movement and that she did realize that she was resisting.

Session two:

The subject's daily log from the week since the first session indicated an immediate improvement in restful sleep. Her ability to relax has moved from the initial grading of 4 to 8, and the energized rating of 10 has moved to a more comfortable 9 for the first few days. After day three she began to notice that her ability to relax was becoming more difficult. The grading for relaxation had dropped from 8 to 5. Even her energized grading dropped from 9 to 8. Though the previously noted numbers had changed, she reported that sleep was still restful. Though subject blocks out pain, she did mention that she was experiencing a little pain in muscles that she attributed to re-arranging furniture in her house.

During this session, I observed that the subject still seemed tense, had difficulty relaxing and still moved her feet in anticipation during range-of-motion and stretching techniques. She also was very conversational during the majority of the session; closer to the end became less conversational and seemed less tense, especially in response to range-of-motion and stretching techniques.

Session three:

Subject's log indicates that she continued to get more restful sleep. Relaxation grading moved up from 5 to 8. It remained until day five and then moved down to 7 and on day six, moved back up to 9. The grading for the energy level teetered on 8 and 9 for the first few days. After day three it fluctuated between 9 and 10.

As the session began the subject was again very conversational. She was still seemingly resistant to range-of-motion and stretching techniques. However, the conversation, muscle tension and resistance to range-of-motion and stretching techniques subsided earlier in this session than in any of the previous sessions.

Session four:

Subject's log indicates that she continues to be getting restful sleep. Her relaxation grading was immediately moved up to 10 after the last session. It did move down to 8 on day two and remained there for the rest of the week. Her energy level dropped to and remained at 9. Overall she reports that the ability to relax is lasting longer between sessions.

I observed that the subject was conversational in the beginning of the session and the conversation tapered off much earlier than in previous sessions. There was much less resistance to the range-of-motion and stretching techniques. At the end of the session we agreed that her ability to focus on relaxing was much less challenging to her.

Session five:

Subject's log indicates that sleep is still restful. Also, though she was more capable of relaxing during the last session, her relaxation capability decreased slightly from 8 to 7 for the next two days following the session. The rest of the week she recorded at 8 except for day four and it was then at 9. All days, during this report period, she reported her energy level at 9, except for day six, which was 8. She openly discussed how much easier it is to relax and stay more calm, and that feeling is lasting even longer between sessions.

I noticed during this session that the subject was much more relaxed just shortly after the session began. Conversation was minimal in the beginning of the session and completely subsided. Resistance to range-of-motion and stretching techniques was less in the beginning than previous sessions and continued to improve as the session progressed. Anticipation of movement was far less in comparison than to the initial visit.

Post-sessions:

Subject's log indicates that during the week following the final session her sleep continues to be restful and uninterrupted. She still feels rested when waking. Relaxation level was at 9 for the first couple of days and moved down to 8 on the third day and then finally to 7 for the rest of the week. Energy level is consistently held at 9.

## Summary

The subject has never received reflexology treatments prior to this experience. Now that she has, she feels that reflexology has helped considerably. She reports a difference in her ability to get more restful sleep and to achieve relaxation more easily. During the process of treatments she mentioned that it seemed as though anxiety and fatigue were closely related to relaxation, even though she continued to rate them on the scale as not being experienced. She has expressed that she is more aware of how to focus on relaxation and how to achieve it. She states that she would like to continue with reflexology sessions on a regular basis.

The subject has chosen to have a very positive focus. Initially, she didn't present symptoms that she was unwilling to acknowledge. She reported with no anxiety, pain, nausea, depression, stress or fatigue, in part as an effort not to focus on the negative. Special notations were made on the daily log specifically for that reason. Her most specific request was to be able to relax; she believed her ability to do so was difficult. The initial report shows, though she reported being rested upon waking, her sleep was intermittent and interrupted. After the initial session she reported that sleep became more restful, and that report stayed the same throughout the remainder of the sessions.

The sessions themselves proved to be a progression of relaxation accomplishments. During the first session, she was very conversational. During the entire session, she exhibited a tremendous amount muscle tension in the feet and a great deal of resistance to ROM (range-of-motion) and relaxation techniques. She actually resisted against the techniques so strongly she would anticipate the direction of the moves, either during initiation of the technique or prior to it, if possible. As the study sessions progressed, muscle tension and resistance began to decrease. There was notable improvement with each session. Conversation began to taper off earlier on with each session as well, and it became easier to observe breathing patterns. Calm, steady breathing became apparent earlier on in the sessions and that progression continued throughout the study. By the last session of the study there was a considerable and notable decrease in muscle tension in the feet, resistance to ROM and relaxation techniques, and conversation; and increase in calm, steady, relaxed breathing. Overall this subject has improved her ability to achieve more restful sleep and relaxation and has improved her "quality of life".

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