Fibromyalgia and Reflexology

Subject's Age:  68  
Subject's Occupation:  Retired factory worker  
Therapist:  Jackie Anderson  
Credentials:  registered nurse, certified reflexologist, guided imagery therapist, aromatherapist, laughter yoga Instructor, trained in mind/body healing at Harvard University

Fibromyalgia as defined by Wikipedia is a disorder classified by the presence of chronic widespread pain and a heightened and painful response to gentle touch. (http://www.mayoclinic.com/health/Fibromyalgia/DS00079/DSECTION=symptoms) Fibromyalgia is a chronic condition characterized by widespread pain in the muscles, ligaments, and tendons, as well as fatigue and multiple tender points/places on the body where slight pressure causes pain. Fibromyalgia is more common in women than in men.

Signs and symptoms of fibromyalgia can vary, depending on the weather, stress, physical activity or even the time of day. Common symptoms include:

1. Widespread pain: Fibromyalgia is characterized by pain in specific areas of the body when pressure is applied, including the back of the head, upper back and neck, upper chest, elbows, hips and knees. The pain generally persists for months at a time and is often accompanied by stiffness.
2. Fatigue and sleep disturbances. People with fibromyalgia often wake up tired and unrefreshed even though they seem to get plenty of sleep. Some studies suggest that this sleep problem is the result of a sleep disorder called alpha wave interrupted sleep pattern, a condition in which deep sleep is frequently interrupted by bursts of brain activity similar to wakefulness. People with fibromyalgia miss the deep restorative stage of sleep. Nighttime muscles spasms in the legs and restless leg syndrome also may be associated with fibromyalgia.
3. Irritable bowel syndrome (IBS). The constipation, diarrhea, abdominal pain and bloating associated with IBS are common in people with fibromyalgia.
4. Headaches and facial pain. Many people who have fibromyalgia also have headaches and facial pain that may be related to tenderness or stiffness in their neck and shoulders. TMJ dysfunction, which affects the jaw joints and surrounding muscles, also is common with people with fibromyalgia.
5. Heightened sensitivity. It is common for people with fibromyalgia to report being sensitive to odors, noises, bright lights and touch.

Other common signs and symptoms include: depression, numbness or tingling sensation in the hands and feet, difficulty concentrating, mood changes, chest pain, dry eyes, skin and mouth, painful menstrual periods, dizziness and anxiety.

In one study where 10 fibromyalgia sufferers received reflexology treatments twice weekly for five weeks, researchers found definite improvement in the symptoms of all 10
of the patients with no side effects. Fibromyalgia sufferers who have undergone regular reflexology treatments report an improvement in: mental clarity, irritable bowel syndrome, fatigue, sleep disorders, depression, myofascial pain and tender point pain. (http://www.fibromyalgia-symptoms.org/fibromyalgia_reflexology.html)

**Subject:**
My subject is a 68-year-old female, retired from a factory position. Her complaints regarding her fibromyalgia include: aching, tenderness, tired, sometimes more irritable, “crawly” skin sensations, prickling sensations especially in her legs and feet and sometimes in her arms. She also experiences dry eyes, sleeplessness (at times sleeps two to five hours at night), feels like a “walking zombie” at work and everywhere. She states that her doctor didn’t listen and she felt as if he didn’t believe in fibromyalgia. She has lived with fibromyalgia for "several years". She said that no two days are alike. She said she is sore in one spot one day and the next day other spots. She has tried several different remedies for symptom control including: Tylenol, Aleve, prescription medication, and tried support groups on two different occasions. She reports that listening to the group participants depressed her and that she felt worse after every meeting. She quit going as she tried to think more positive and upbeat. She feels she “can't dwell forever on the aches and needs to get on with life (if not too achy!).”

Currently she is not taking any prescription medication for her fibromyalgia other than a sleeping pill and over the counter Tylenol and Aleve for pain control. She takes her sleeping pill every night and usually gets three hours of sound sleep with them.

**The Study:**
The study consisted of weekly one-hour reflexology sessions for five consecutive weeks. The time of day was consistent for all sessions: morning hours, first part of the week. The sessions were 30 minutes on each foot. No other modalities were offered for this study. The sessions on each foot were in the same sequence weekly for all sessions. The client was given a CD of a body scan that she listened to every day to enhance her body awareness and she kept a daily log regarding her body awareness. She did an initial body scan evaluation and daily thereafter. The evaluation tool is as follows:

1. Hours of sleep last night
2. This morning I feel: (tired, rested, anything else that describes how you feel)
3. How many hours of uninterrupted sleep did you get last night?
4. Do you feel refreshed this morning?
5. Rate any discomfort you feel in identified areas of the body scan: (grading pain from 1-10)  
   0= no discomfort  
   1-2= notable slight discomfort  
   3-4= discomfort identified but tolerable without any interference in activities of daily living (ADLs)
5-6= nagging discomfort with some interference of ADLs
7-8= nagging discomfort with extreme interference of ADLs
9-10= extreme discomfort; unable to function; staying in bed

Results:
The following results are objective data taken from the grading log the client kept on a daily basis. The numbers I chose to include in my analysis of this study are those that infringe on her activities of daily living and any changes in those areas with the grading scale above four.

The initial body scan prior to the first treatment revealed a grading of:
hips: 8
lower back: 6
entire back: 6
shoulders: 5
body as a whole: 5
skin: dry

Day 1 after the first treatment:
sleep: 4 hours in bed and 4 additional hours in her chair; felt tired this morning and not refreshed
hips: 8
lower back: 1
entire back: 8
shoulders: 1
body as a whole: 5

Day 2 after treatment:
Sleep: 6.5 hours of sleep and feels "sorta tired"
balls of feet: 6 (new ache today)
hips: 5
lower back: 4
entire back: 4
shoulders: 4
neck: 4 (this is a new area of discomfort for her)
body as a whole: 4

Day 3 after treatment:
sleep: 6 hours and feels rested and refreshed
balls of feet: 5
hips: 3
lower back: 4
entire back: 3
shoulders: 4
neck: 4
body as a whole: 4
Day 4 after treatment:
sleep: 5 hours, feels tired and says her mind feels refreshed
balls of feet: 2
hips: 4
lower back: 3
entire back: 3
shoulders: 4
neck: 3
body as a whole: 4

Day 5 after treatment:
sleep: 7 hours, feels relaxed and refreshed
balls of feet: 1
hips: 4
lower back: 2
entire back: 1
shoulders: 3
neck: 3
body as whole: 4

Day 6 after treatment:
sleep: 4 hours
balls of feet: 7
arches: 8 (first time of this complaint)
ankles: 4 (first time of this complaint)
calves: 6 (first time of this complaint)
shins: (first time of this complaint)
knees: 4 (first time of this complaint)
thighs: 6 (first time of this complaint)
hips: 5
lower back: 4
entire back: 5
shoulders: 7
neck: 6
fingers: 4 (first time of this complaint)
body as whole: 6
skin: dry
other complaints: throat is feeling sore; rates it at a “5”

Analysis of the first week of treatment: The numbers have significantly increased in intensity of discomfort. Areas not identified are now starting to ache as time for the next treatment approaches. Sleep also has become worse as the week progresses. The second day after the reflexology session showed a notable change in sleep. She also was able to document that she felt refreshed.
Day of treatment (prior to her first treatment) she reported poor sleep and significant areas of discomfort especially to the balls of her feet. This is also the first day reported she had to take extra medication for discomfort.

**Analysis of the second week of treatment:**
Day after treatment she reported 5.5 hours of sleep and felt rested. The sleep for the rest of the week indicated average sleep was 6.3 hours/night. The numbers on the body scan grading scale show a significant amount of discomfort increase when it is getting closer to receiving her next treatment. The day of treatment indicated balls of feet rated: 7, arches: 6, shoulders: 6, body as a whole: 4, and neck: 4. Days two and three show all numbers of the body scan rated under 3 with the exception of shoulders and head. By the end of the week, closer to treatment time the numbers gradually increased and on day six the complaints increased to seven issues over a grade of 3, which indicate interference with ADLs. She also reports discomfort in her jaw as well as her skin feeling dry. Day before treatment she was only able to sleep 1.5 hours.

**Analysis of the third week of treatment:**
Average amount of sleep was: 5.5 hours. Treatment day her complaints were shins: 4, shoulders: 4, and reported her skin was dry. The first day after treatment was the day she had the most significant indicators. Sleep was poor, balls of feet: 5, hips: 5, lower back: 4, entire back: 4, shoulders: 6, body as whole: 4, reported her skin felt tight and her ears were aching. The following day the indicators decreased to four areas graded 4 and over: balls of feet, hips, shoulders and body as whole. The next day (day three) following treatment her balls of feet were not an issue and the indicators of concern decreased to two.

**Analysis of the fourth week of treatment:**
Average amount of sleep: 6.9 hours. Day of treatment she realized her right thumb joint hasn't been so full of pain and she is breathing more freely. This week the indicators are even less. There were four days of all the numbers of the body scan grading scale under 3 with no interference of ADLs. Her activities have increased: she played bowling on the WII, raked snow off the roof and was able to go shopping. Also, notable in her daily log, she expressed excitement especially about her right thumb joint improvement.

**Analysis of the fifth and final week of treatment:**
Average amount of sleep: 7.25 hours. This week showed very few indicators of discomfort and interference in ADLs. As the reflexology sessions continued over this five-week period, the symptoms she entered the study with have all decreased. Her sleep has improved and her ADLs have had a profound positive impact.

**Comparison of pre-treatment grading and end of study grading:**

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<tr>
<th></th>
<th>Pre-treatment</th>
<th>End-of-study</th>
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<tbody>
<tr>
<td>average amount of sleep</td>
<td>2-5 hours</td>
<td>7.25 hours</td>
</tr>
<tr>
<td>hips</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>lower back</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>entire back</td>
<td>6</td>
<td>2</td>
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Recommendations to subject:
Closer to the time of treatment it was noticeable in the grading numbers that her aching and interference in ADLs increased. My recommendations for this client would be to maintain weekly reflexology sessions for homeostasis and symptom control. I would like to do a pilot study again with this client and offer reflexology treatments 2x/week for 3 weeks and weekly thereafter to see if there was a significant change.

Conclusion:
There are about six million people in North America who suffer from fibromyalgia syndrome, and more and more people are being diagnosed with fibromyalgia syndrome. At this point in time there is no known cause and certainly no cure. Fibromyalgia syndrome has truly impacted many people's lives, however, the professionals in the medical field still cannot offer a whole lot of insight into this disorder.

What is the economic impact of fibromyalgia?
In 2008, a study was published in the June issue of Journal of Rheumatology, revealing that 26% of the fibromyalgia patients surveyed were receiving some form of disability payment. The average cost of treating a fibromyalgia patient was $2,274 per year. The study indicated that despite the variety of treatments employed, patients showed no significant improvement over the seven-year follow up period. The high disabling rate, coupled with the lack of effective therapies should have been a triggering factor to conduct more research on this condition; instead the National Institute of Arthritis, Musculoskeletal and Skin Diseases opted to fund a cost containment study on fibromyalgia to help out the HMO's, not the patients who suffer. The needs of patients with fibromyalgia are being forced into second place by pitting their needs against those of the cost-cutting HMO's to make a profit. The cost issue is real, but disregarding individuals with fibromyalgia is not an effective approach. The pain and draining fatigue of fibromyalgia will not go away and those suffering from this will continue to seek medical attention and many will be forced to apply for some type of disability compensation.