

Yoga practice and Rheumatoid Arthritis – a case study

by **Hilla Arnon**

What is Rheumatoid Arthritis (RA)

Rheumatoid Arthritis is an autoimmune disease in which the body's immune system attacks cells and tissues of the joints. It is expressed mostly in the joints of the toes and fingers, the palms and feet, the knees, wrists and sometimes other joints. The disease is characterized by severe pain, swelling of the joints and sensitivity to touch and to temperature changes. Joints may develop an inflammatory condition that include: swelling, redness, fever, pain and limited range of motion. Inflammation may develop to the point of deformation, changes in the structure of the joint, and in severe cases it might amount to loss of function and a need for joint replacement.

The disease is quite common and it is found in approximately 1% of the population. A Higher percentage, up to three times higher, is found in women and it usually tends to erupt between the ages of 20 to 50, but it can occur at any age.

The joint is a juncture where one bone connects to another. It is wrapped in a capsule made of connective tissue (tendons and ligaments) and its inner lining is the synovial membrane that secretes the synovial fluid whose role is to lubricate the joint. In rheumatoid arthritis cells of the immune system, known as B cells, migrate from the blood to the synovial membrane tissue of the joints, attack it and cause damage to the tissue and the cartilage of the joint.

In addition to pain, tenderness and redness in the joints, the symptoms of the disease include the following:

- Fatigue, weakness and body temperature that is slightly higher than normal and lasts for long periods of time;
- A feeling of stiffness and difficulty in moving the joints in the morning;
- The inflammation is expressed symmetrically for example: both knees will be affected and not just one;
- Structural changes in the joint itself that can be detected on x ray.

Patients with rheumatoid arthritis differ from each other in terms of the number of joints afflicted, their type, the development rate of the infection, the symptoms and specific medications that are beneficial in their case. The disease has direct and immediate effects on daily activities, ranging from opening the lid of a jar to walking and making the transition from sitting to standing up. All those symptoms depend on the severity of the infection.

We can distinguish between periods of flare-up of the disease, during which the pain, swelling and sensitivity are aggravated and one feels pain and weakness in the whole body, and quiet periods of recession, in which the range of movement is still limited but is moderate, the pain and sensitivity decrease significantly, the overall feeling is better and the daily functioning is easier and they feel more comfortable.

The cause of the disease is still unknown. Some of the literature claims that there is a hereditary factor. Some assume that environmental factors such as smoking, stress, and so on affect this condition.

As part of coping with the chronic condition, it is recommended for patients suffering from RA to foster a beneficial and balanced lifestyle that includes a healthy diet and moderate exercise.

The practice of yoga is a beneficial exercise that answers the need of moderation.

Case Study

Tamara is a woman in her 50s, married with two adult children, works full time, and maintains a complete daily routine. She has been suffering from rheumatoid arthritis for 15 years. The root of her disease is probably genetic: her father suffered from arthritis, and also her sister was diagnosed with rheumatoid arthritis, though of a different type.

Tamara is treated with medication – she receives a transfusion every year or two, and during acute periods she takes painkillers. In cases of local flare-up of the inflammation she is treated by steroid injections into the inflamed joint. The overall quality of Tamara's life when the inflammation is in recess is good and she can lead a normal daily active routine.

In addition to the arthritis Tamara has asthma which is almost completely dormant and some allergies. She suffered for years from periods of low back pain and a sense of strain in her shoulder girdle. These phenomena have lessened considerably over the years of yoga practice. Apart from that she enjoys good health.

Tamara's arthritis affects mainly the knees and wrist bones – in these joints the range of motion is limited i.e., narrower than normal, and when the infection flares-up the pain is centered mainly in these joints. Symptoms are also found in her feet – in the joints of the toes, in the right hip joint – where the range of motion in rotating the hip inwardly is limited, and also in the fingers of both hands.

We have been meeting for a private yoga class once a week for the past seven years consistently.

When I first met Tamara she had a history of eight years of dealing with the disease. Over the years she recognized the progress route of the inflammation and the symptoms, and the disease has been stabilized by medication. It should be noted that finding the right medication to the patient often involves a process of trial and error, since different patients respond differently to the same drugs despite the identical disease.

It should also be noted that Tamara arrived to my classes with a rich experience of working with the body, especially the Feldenkrais practice.

I find it important to mention these two factors as they eased for us the beginning of our work together, contributed greatly and continue to contribute to Tamara's ability to deepen her practice of yoga and persevere.

Tamara's limitations in the beginning of our work seven years ago were the following:

- Limited range of motion and a limited ability to carry weight at certain angles in the afflicted joints.
- A relative weakness in the muscles of the front thighs and shoulder girdle, that to my opinion were due to the limited range of motion of the knees and wrists;
- Chronic pain in the joints;
- Lower back pain that at times disabled her completely.

Tamara's Vijnana Yoga practice

A General structure of a lesson

- Sitting;
- Practicing Pranayama;
- Gentle warm-up, mostly lying on the back – one of the symptoms of arthritis is a feeling of stiffness and contraction in the body and in the muscles. I find that a gentle warm-up with soft and slow movements helps the body to relax and unwind and is an excellent preparation for asana practice.
- Standing poses – this is the warm-up and preparation for the essential part of the class that consists of forward bends, backbends, strengthening of the shoulder girdle or deepening into the standing poses. These poses replace the Sun Salutation that Tamara does not perform due to the sensitivity in her knees and wrists.
- The center of the lesson – forward bends, backbends, shoulder girdle strengthening and deepening into the standing poses.
- towards the end of the lesson – calming and relaxing poses such as:
 - Supta Padangusthasana – leg stretches – using a belt or with feet on the wall,
 - Sarvangasana – with modification on the wall,
 - Viparita Karani – a blanket or a pillow under the pelvis and legs on a wall or on a chair,
 - Sitting – Sukhasana or Baddha Konasana.
- Savasana – relaxation was often done with bolsters under the knees and ankles to deepen the sense of rest and relaxation of the legs and the lower back. We can get a sense of the importance of the bolster to her practice from the fact that Tamara calls it "the man's best friend."

Standing poses

Like the process of a regular practice we began with basic standing poses:

- Tadasana and Virabhadrasana I – Warrior pose I,
- Virabhadrasana II – Warrior pose II,
- Trikonasana – triangle pose,
- Uttanasana – Standing Forward Bend.
- Prasarita Padottanasana – Standing in a wide stance and bending forward.

We moved to the next poses:

- Vriksasana – Tree pose
- Parivritta Trikonasana – twisted Triangle Pose
- Parsvakonasana – one side of the body extended in lateral bend,
- Parsvottanasana – sides of the body extended in forward bend
- Utkatasana – Chair Pose.

Gradually we started to connect the postures to form sequences – Tamara greatly enjoys the flow of the movements – and then we added the more challenging poses in terms of posture, flexibility strength and balancing:

- Ardha Chandrasana – Half-moon pose
- Parivritta Ardha Chandrasana – twisted half-moon pose
- Virabhadrasana III – Warrior pose III,
- Parivritta Parsvakonasana – extended sides of the body in forward bend, twisted.

Modifications:

1) during the first period we worked with legs in small spread: for a comfortable balance, to make it easier on the knees, especially in poses where one knee is bent, and to improve the effectiveness of learning and creating a foundation of an effective posture that does not burden the lower back, an area that caused Tamara pain.

2) Using aids for complex poses in terms of balancing: such as Ardha Chandrasana, Parivritta Ardha Chandrasana and Virabhadrasana III. For some time we used thick rectangular blocks made of sponge, but it turned out that they were not stable enough. Today we use a chair to rest one hand or two on it, yet the emphasis is always on rooting and placing the weight on the leg and not on the hand resting on the chair.



Virabhadrasana III



Parivritta Ardha Chandrasana



Ardha Chandrasana



3) Instead of Utthita Hasta Padangusthasana – hand to the toe of the outstretched leg, which is the last position of the Virabhadrasana I sequence. Tamara ends the sequence with a standing twist with one foot on a chair, and the direction of the twist is to the bent leg resting on the chair.



4) The dancer pose – Tamara practices it next to the wall facing it; one hand touching the wall to help balancing, and the other holds a belt bound around the back of the foot that is bent backwards. Similarly, one can practice the dancer pose lying on their side. In these poses we elongate the front leg muscles, in addition to working on balancing, caring for the center of the body and maintaining a quiet back. This practice is important for Tamara, since she does not practice Virasana and Vajrasana



Side view



Rear view



5) After she felt established and happy in Utkatasana, which is her favorite pose, Tamara began practicing the position of the feet in Garudasna. Here too, facing the wall so that one hand can touch it, but not lean, just to help with balance

Sitting

Tamara practices fully these sitting poses – Sukhasana and Baddha Konasana.

Due to the restriction of the knees she cannot practice Virasana, Vajrasana and Ardha Padmasana – Half Lotus. Therefore, we found the following modification:



1) Virasana with one leg, sitting on a chair – sitting close to the right side of the seat and sending the back of the right foot on the ground, towards the right rear leg of the chair. The same with the left foot. In this way she gets an extension of the front thigh and calf muscles and flexibility of the back of the foot. It should be noted that Virasana or Vajrasana with elevation on blocks, are not possible for Tamara



2) Half-lotus, with one leg, sitting on a chair – sitting on the edge of the seat so that the back is not supported by the back rest. The left foot on the ground (left heel under left knee) and the external ankle of the right leg resting on the left thigh near the knee. In this way we get an opening of the right hip and extension of the muscles of the buttocks and part of the thigh muscles

Hand Balances

Since the Inflammation damaged the wrist bones, weight bearing in certain positions is not possible for her because there is no range of motion or 90 degrees flexion. Therefore, handstands, Bakasanas, and Vasisthasana, are not practiced.

Tamara practices the following poses to strengthen the shoulder girdle, arms and palms:



Downward facing dog – usually Tamara practices this posture gradually. First with hands in fists against the wall and an angle of about 90 degrees between the hips and the pelvis.



Then, with the outstretched palms resting on the edge of the chair seat and the angle between the hips and pelvis is less than 90 degrees.



In preparation for a full pose of downward facing dog she practices with palms placed on hard sponge blocks adjacent to the wall.

Tamara enters the full pose of downward facing dog from Uttanasana, while progressing forward on her fingertips, until her palms are placed on the mat spread in an angle that is possible for her wrists. Coming back from the Dog pose is done by transferring the weight back to Uttanasana, or by resting the knees and forearms on the floor for a few moments, in a sort of an embryo pose, and then transferring to sitting or lying down.



Dog pose on forearms – Tamara practices a variation of this pose standing with her forearms against the wall with the elbows, forearms and hands rooted into the wall at 90 degrees angles between the forearms and the arms and between the arms and the rib cage.



The next step is dog pose on the forearms with the elbows, forearms and hands rooted to the chair seat.



Here we strive to have an angle bigger than 90 degrees between the arms and ribs and between the arms and forearms. It is also possible to practice with elevation by blocks adjacent to the wall as a more challenging stage after the practice with a chair.

Backbends

Tamara practices basic backbend poses – Salabhasanas. For a long time she did not practice those poses because of the pain and sensitivity in the lower back, that were aggravated by the backbends and benefited continuously from forward bends. During the recess from practicing these poses Tamara's practice deepened in terms of relaxation, rooting and connecting. Slowly she learned to relax further and further the lower back, the buttocks and tail bone area, so that the position of the anterior pelvic tilt was moderated, the legs became stronger and posture improved so there was less and less strain on the sensitive area in the back. Recently Tamara began to practice Salabhasana and she implements the same understanding of relaxation, rooting and connecting that she acquired in the standing poses, in poses lying prone, and with great success. In these poses there is no restriction in terms of arthritis.

In backbends such as Setu Bandha (small bridge pose), Urdhva Mukha Svanasana (Upward-Facing Dog), Ustrasana (Camel Pose) Dhanurasana (the bow), and Urdhva Dhanurasana (Bridge), the restriction of movement of the knees and wrist is reflected, and we do not practice them.

However, Tamara practices the moderate back bend that is part of certain poses such as Virabhadrasana I, the preparation for Parsvottanasana, with the hands behind the back, and also in the practice of a kind of a Cobra pose, standing against the wall or sitting on a chair.

Forward bends while sitting

From the selection of forward bends while sitting Tamara practices those that do not involve deep knee bending:

- Janu Sirsasana
- Parivritta Janu Sirsasana
- Upavistha Konasana
- Baddha Konasana
- Paschimottanasana

Inverted poses

The two inversions that Tamara practices are:

Partial Sarvangasana through mounting with the legs on the wall, and without placing the full weight of the pelvis on the hands.



Sarvangasana 2



Sarvangasana 1



Mounting to Sarvangasana 2



Another pose is Viparita Karani – the pelvis is elevated on a bolster or on blankets, and the feet are on a wall or on a chair.

Other poses

Supta Padangusthasana – during acute periods of inflammation of the knee Tamara practices this pose with a straight leg from the start, i.e. without the stage of straightening the bent knee.

Variations of Navasana – Boat pose – Eka Pada Ardha Navasana, Navasana with one leg straightening up the weight of the upper body on the elbows and forearms.

Aids & accessories for support and for resting poses

Accessories such as a chair, blankets, blocks, belts, and bolsters – assist in various ways in the active asanas and also serve as a good support for deepening the relaxation in the passive and restorative poses. Rest is important in dealing with arthritis, especially during the acute periods and the accessories help the body to relax, rest and regain strength.

Training pace

Practicing yoga when dealing with arthritis requires a moderate training pace, during which the practitioner can be aware of body sensations in movement and in resting periods within the poses. This pace allows noticing the presence of pain or its relief and maintaining ranges of motion where there is no over burdening of the joints. Working at a moderate pace builds a sense of confidence in terms of balance, it facilitates the understanding of the directions of body movement in space, and in general it allows a continuous presence of the mind with the body and breath.

Working with the principles from the perspective of Vijnana

In Vijnana Yoga the seven principles constitute the core of practice: practicing Relaxation, Quieting the mind, clear Intent, Breathing awareness, discovering Rooting and Connecting and developing the capacity of Expanding into Elongation and Widening, without losing the Rooting and Connection. These principles are the basis for organizing and guiding the mind, body and breath in the practice of each asana. The same principles are also the guidelines in finding the appropriate modification of classical asanas according to the limitations of the practitioner. This is the importance of finding the middle the mental and physical center, and consequently a quiet and strain-less back in all poses will follow, even in the complex poses. It is less important to me to perform, for example, Virabhadrasana III fully and without support under the arms, if this overloads the joints of the standing leg, weighs on the back and shoulder girdle and puts the whole body under stress. We can use support under both palms using a chair or blocks, and in this mode direct the rooting of the standing leg that will bare more and more weight, develop Intent and rooting backwards of the leg in the air, learn Elongation between the tail bone and the head that keeps the back quiet, and then experiment in detaching one hand and sending it forward with awareness to Rooting and Connecting in the whole body.

In my experience, the ability to move forward in terms of Rooting, Connecting, Extending, finding balance in the poses, especially the complex ones, increases if we work in a gradual way, advancing slowly.

I found out that there is efficiency and gain, in terms of focusing the mind, using a controlled effort and having a good sense of self, in a practice that has a relaxed sense in the poses as a starting point from which we will meet the challenge. In this way every now and then a new ability arises and becomes accessible, presents itself – it cannot be forced. This happens to us all even in a regular practice, and in working with limitations this requires an even greater creativity, that will help to moderate and make the complex advancement gradual and thus support the practitioner in points of difficulty.

Over the years Tamara deepened the practice, both in terms of the complex poses she practices and in terms of the quality and depth of her practice from the perspective of working with the principles. With the help of Connecting and Rooting her posture is more effective also in large ranges of motion, both in widening the stance in standing poses and in terms Elongating into space. I suppose that, due to a more balanced weight bearing and a more efficient flow throughout the skeleton, the load on the joints is more moderate and balanced.

The ability to let go of unnecessary effort during movement and during staying in poses also contributes to reducing the strain on the joints and lower back. Transitions between poses in sequences, which were a challenge in themselves, particularly transitions into the complex poses in terms of balance, became smoother and more efficient with the deepening of practice.

The legs got stronger, a present "body center" and a quiet back were established, Rooting and Connecting to the furthest edges from earth evolved into Expansion and Elongation. The flexibility of the muscles of the legs, back and shoulder girdle is maintained and even increases.

Summary

Today, after seven years of practice, Tamara practices the sequences of standing poses almost fully: Downward-Facing Dog without pausing on the knees (on the way up, basic backbends – Salabhasanas, seated forward bends and poses lying on the back such as Supta Padangusthasana and abdominal poses. One inverted pose that we practice is a version of Sarvangasana next to the wall. That is, the practice is done while lying on the back, the stomach or on the side, sitting on the ground and on a chair, standing on both feet and a four point stance. We almost completely refrain from a six point stance due to the damage of inflammation in the knees, and also from hand balances due to the damage in the wrist. Strengthening the shoulder girdle and arms is done through Downward facing Dog and a dog pose on forearms with variations.

Tamara reports that her hip muscles are strengthening; a feeling that is supported by her routine medical tests. This strengthening supports the knee joints. She feels that the range of motion in her wrist bones is maintained, and even increased, due to the

practice of Namaste and Downward facing dog with variations. The lower back pain is almost completely gone, and the range of motion in the shoulders has increased.

Tamara feels that the practice of Pranayama helps keep the asthma in a quiet state, and she can pass through winters without colds and severe flus. It helps her during physical effort as climbing stairs and even as a tool for relaxation and calm when she experiences stress, tension or nervousness.

Moreover, the practice of yoga eased the pain that she felt four years ago when she went through a severe flare of the disease. During a few weeks, while Tamara was waiting for an approval of the health authorities for a drug that will help her in treating the inflammation, she suffered severe pain throughout the body, and the painkillers that she took did not ease her pain sufficiently. During this time she turned to practice yoga at home on her own since she felt that the practice of Yoga has a very relieving effect on the pain; a relief that lasts a few hours after the end of practice. She reported that the relief that she felt following the practice was general, not just in a particular joint, but a general feeling throughout the body. The practice filled the space that the painkillers could not satisfy and helped her get through a few more hours a day with reduced pain.

Tamara's feels, and so do I, that when yoga is practiced with a simultaneous recruit of mind, body and breath, into a joint focus provides an additional advantage to our general feeling, body and soul, that is experienced as calm, relaxation, a center, as a sense of relaxed and beneficial being within.

Such practice is discovered to ease the pain; it helps people who live with the constant presence of physical pain to deal with it and with the unexpected appearance of pain along the way.

I find that a soft approach towards ourselves in the practice, searching for pleasant ranges of motion and staying in the ones that feel good – and not in those that arouse pain – cultivate a sense of calm and confidence and of having the ability to be in motion and action without pain. This is a significant and encouraging state for someone that is used to the almost constant presence of pain.

This approach dictates a moderate work pace that is very attentive to the body in each and every practice. It also allows long-term processes in which strength, flexibility and a physical and mental stability evolve and are established. The Principles – Relaxation, Quieting, Intent, Breathing, Rooting, Connecting, Elongation and Expansion – are the tools for such practice.

I would like to emphasize that the work with Tamara is done in a **joint** and constant search for the useful and beneficial practice – by questions like – does it evoke pain? Eases pain? Doesn't increase pain, yet doesn't ease it? Pleasant? Unpleasant? Feels like a positive effort or as excessive effort?

Tamara is one of my students among a few with rheumatoid arthritis. The disease and its accompanying limitations differ from one to the other. There are differences in the nature of inflammation, pain intensity, frequency of exacerbations (flare-ups), and the effects of medication. These differences are reflected in various joints in the body. For example, poses that are possible and benevolent for Tamara like prolonged practice of standing poses are painful for another student due to painful inflammation in the feet. This other student can stay relatively comfortably on a six point stance and the child pose, while Tamara is unable to practice them due to the limitations in the knees.

My work with students that have physical limitations due to rheumatoid arthritis show that they will be limited in the training and practice of yoga, but there are no built sequences and no uniform answers for how to practice. Practicing yoga we endeavor, while applying the seven principles of Vijnanas Yoga, to have an encounter of a joint investigation that will yield a beneficial long-term practice.

About the author

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