## Yogic Exercise for IVF and IUI success by Divine approach

#### Nita Pande PhD Yoga, Dr Shubhada Neel, Dr. Reema Kumari, Dr Akanksha Kumar

In vitro fertilization and IUI techniques prove to be a boon for couples who are normally unable to conceive. For rejuvenation of today's unhealthy world, we need spiritually and emotionally strong babies in addition to physical health and so if some holistic well-being practices are applied beforehand, around IVF and IUI, they may serve as blessing for the society.

Yogic exercises play an important role to prepare healthy womb for 'Angel' baby and also prepare couple to be mentally and physically strong.

Yogic exercises quicken the process of eliminating the toxins and waste materials from the body through the skin, lungs, spleen, kidney and bowels etc. These exercises are means of balancing and harmonizing the body, mind and emotions. It brings different body functions into perfect coordination for good health. It gives other benefits also as:-

- Builds and maintain healthy muscles, bones and joints.
- Promotes stamina and strength.
- Reduces the risk of a miscarriage and pregnancy related complications.
- Helps to reduce body weight, depression, anxiety and stress.
- Restores hormonal balance.
- Promotes relaxation and promotes good sleep.
- Prepares healthy womb for foetus and also puts good impact on foetus position in the womb.
- Releases happy hormones which gives the good feeling of well being.
- Normalises blood pressure.

Thus, promotes healthy gamete (sperm and egg) production if practised by couples.

### General instructions before practice: -

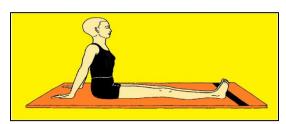
- Consult a yog therapist before practising asanas.
- The bladder and stomach should be empty while doing asanas.
- Practice can be done after 15 minutes of liquid intake; 2 hours after breakfast and 3-4 hours after lunch.
- Always breathe through nose and synchronise the breath with the asanas.
- Use folded blanket or yoga mat of natural material for practice.
- Practice in pure and calm environment.
- During fever and menstrual cycle, stop practising.
- Never exert undue force while practising asanas, it should be done according to body capacity.
- Wear loose light and comfortable clothes.

- Awareness on breath, thought and body should be maintained during practice for optimum benefits
- Relaxation should be performed before, during and after, asanas practices.
- \* Exercise before IVF and IUI: below given sukshm vyayam, asanas and pranayama should be practised at least 3 months before IVF process.

## **Sukshm vyayam (light exercise)**

**Walking:** Yogic walking is very good exercise for whole pregnancy period. Everyday 30 minutes walking in fresh air, during sunrise in the morning and sunset in the evening is beneficial. Be aware towards breath and environment, feel that God's blessing is coming to you, in the form of sun rays and those rays are providing protective shield to you and your child. And also visualise that powerful rays are radiating from you and empowering both souls.

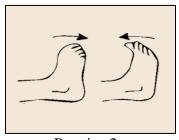
**Practice 1:** Base position (prathmik sthiti)



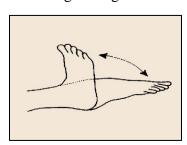
Sit with the legs outstretched, place the palms of the hands on the floor behind the buttocks. Lean back slightly close the eyes and relax the whole body through deep breathing in this position.

## **Practice 2:** Finger shrinking

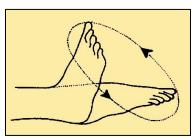
Sit in base position, inhale while shrinking of fingers and exhale while relaxing fingers.







Practice 3



Practice 5

#### **Practice 3:** Toe bending

Sit in the base position and move toe, right and left side. Breath normally.

## **Practice 4:** Ankle bending

Sit in base position, inhale when feet move backward and exhale when feed move forward.

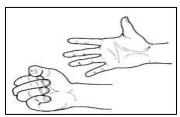
#### **Practice 5:** Ankle rotation

Remain in the base position, keep the feet separated and slowly rotate both feet from the ankle together 10 times clockwise direction and ten times anticlockwise direction. Inhale on the upward movement. Exhale on the downward movement.

#### **Practice 6:** Knee tightening

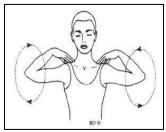
Sit in base position, inhale while contracting knee muscles, exhale while relaxing knee muscles.

**Practice 7:** Fist clenching



Sit in crossed leg pose, bring arms straight in front of the body at shoulder level, then open the hands, palms down and stretch the fingers as wild apart as possible then close the fingers to make a tight fist in the thumb inside. Again, open the hands and stretch the fingers, repeat 10 times. Inhale file making tight fist, exhale on opening the hands.

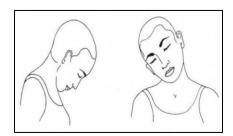
**Practice 8:** Shoulder socket rotation



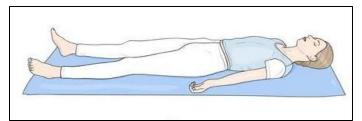
Place the fingers of the left hand on the left shoulder and the fingers of the right hand on the right shoulder. Fully rotate both elbows at the same time in a large circle. Practice slowly 5 to 10 times clockwise and 5 to 10 times anticlockwise according to the capacity. Inhale on the upward stroke, exhale on the downward stroke.

#### **Practice 9:** Neck movements

Sit in a crossed leg pose, with the hands resting on the knees close the eyes, slowly move the head 1. forward and backward, then 2. right and left and then, 3. rotate neck clockwise and anticlockwise. Always inhale on the upward movement and exhaled on the downward moment.



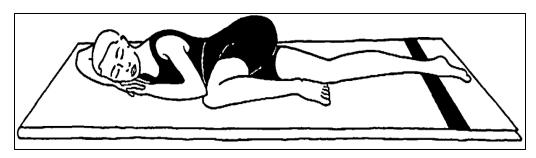
## **Relaxation Asanas:** Shavasana,( Corpse pose)



Lie flat on the back with the arms about 15cm away from the body palms facing upward, move the feet slightly apart to a comfortable position and eyes closed. The head and spine should be in a straight line. Become aware of the natural breath and allow it to become rhythmic and relaxed.

This asana relaxes the whole psycho- physiological system. It should ideally be practiced before sleep, before, during and after asana practices.

## Matsya kridasana (flapping fish pose)



Lie on the stomach with the fingers interlocked under the head. Bend the left leg sideways and bring the left knee close to the ribs. The right leg should remain straight. Swivel the arms to the left and rest the left elbow near the left knee. Rest the right side of the head on the Crook of the right arm. Relax and final position and change the side.

(Pillow can be used as prob, under folded leg)

## Rope pulling:-



Sit with the leg outstretched, work out with hands up and down as you are pulling the hanging rope, down. Repeat it many times according to your capacity.

This exercise helps to strengthen arms and shoulder muscle, and particularly develops and tones breast muscles.

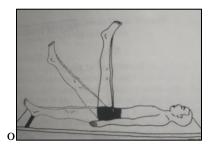
**Jhulasana:** Sit in the squatting position with the buttocks just above the floor. Interlock the fingers of both hands and make a grip just below the knees. Now rock the whole body backwards and forwards on the spine. Inhale as you roll backward exhale as you come forward. Practice this 10 times.

This asana massages the back, buttocks and hips.



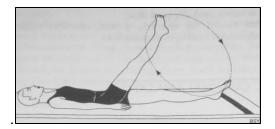
**Padotthanasana:** Lie with the palms flat on the floor, then inhale and raise both legs straight in 90 degrees, hold the posture for few seconds and exhale while coming back. Relax and repeat five times.

This asana strengthens the abdominal muscles, digestive system, reproductive organs, lower back, pelvic and perineal muscles and also helps correct prolapse.



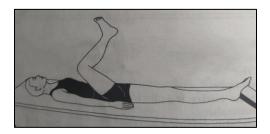
**Leg rotation:** Lie down and relax then gradually raise one leg 5 cm from the ground, keep the knee straight, and 10 rotate the entire like clockwise and anticlockwise,10 times in a large circle, repeat the same process with other leg. Inhale while moving the legs upward Exhale while lowering the leg.

Good for pelvic muscles, hip joints, reproductive organ, abdominal muscles and spinal muscles.



**Cycling:** lie in starting position and relax. Raise both legs and practice alternate cycling moments as the peddling a bicycle. Practice 10 times slowly forward and then 10 times backward. Inhale straightening the legs exhale while bending the legs to the chest.

Good for abdominal and lower back muscles.



**Pawanmuktasan:** Lie in starting position and relax, band bhutni and bring the thighs to the chest, then interlock the fingers of both hands and makeup on shine bones just below the knees. Inhale deeply, exhaling raise the head and shoulders and try to place the nose in the space between the two knees. Hold is the position for few seconds and come back inhaling.

Very effective in removing wind and constipation. It massages pelvic muscles and reproductive organ. It is also useful for impotence, sterility and menstrual problem.

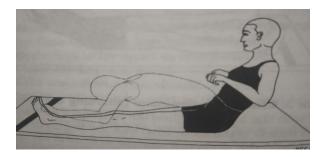


**Naukasan:** Lie down on your back and breathe deeply. Hold the breath and raise the legs arms shoulder had and trunk off the ground. The arms should be held at the same level and in line with the toes. Balance the body on the buttocks. Return to starting position exhaling. It is very useful for women preparing fo child bearing.

**Naukasanchalanasana:** Sit with both legs straight in imagine the action of roaring a boat. clench the hands as do griping oars, with the palms facing down. breed out and band forward from the waste as far as is comfortable, straightening the arms. Breathing in lean back as far as possible drawing the hands back towards the shoulders. the hand should make a complete

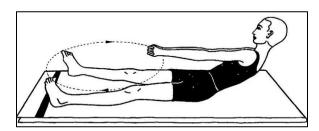
circular moment. this is one round repeat 5 to 10 times as comfortable. Do anticlockwise direction also

This asana gives positive effect on the pelvis and abdominal and releases energy blockages in these areas. It is specially useful for gynecological disorders and also remove constipation



**Chakki chalana:** Sit with the legs stretched out in front of the body, with the feet widely separated. interlock the fingers of both hands and hold the arms out straight in front of the chest. Keep the arms straight and horizontal throughout the practice, do not bend the elbows. Bend forward as far as possible, swinging interlocked fingers across the feet, without straining. Lean back as far as possible on the backward swing. Imagine the action of churning a mill with an old-fashioned stone grinder.

Practice 5-10 rounds clockwise and then anticlockwise direction. This asana is excellent for toning the nerve and organs of the pelvis and abdomen.



**Kauva chalasana(crow walking):** Squat with the feet apart and the buttocks above the heels. Place the palms of the hands on the knees. Take small steps in the squatting position. Walk either on the toes or the soles of the feet whichever is easy. As you take a step forward, bring the opposite knee to the floor. Take as many steps as possible, up to 25 and then relax in shavasana. Breathe normally throughout.

This asana improves blood circulation in leg and pelvic region.



**Titli asana:** Sit in the base position. Bend the knees and bring the soles of the feet together, keeping the hills as closed to the perineum as possible. Clasp the feet with both hands now gently move the knees up and down without using any force. Breath normally.

It tones pelvic muscles and leg muscles.



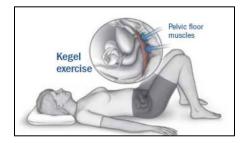
**Spine twist exercise** -Sit in folded legs, back straight, twist your spine left side, right hand on left knee then move left hand back on the floor. Come back to original position now repeat this from other side. behind buttocks. Exhale while twisting spine, inhale while coming back to original position. Repeat it 5 times.

It massages abdominal area and spine.

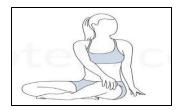
## Vajroli mudra (kegal exercise):

This exercise can be done by sitting or lying. Close the eyes and relax the whole body, take the awareness to the Urethra. Inhale, hold the breath inside and draw the urethra upward. This action is similar to holding back an intense urge to urinate. Hold the contraction as long as comfortable. Exhale while releasing the contraction and relax.

This exercise regulates and tones the entire uro- genital system. This is nice pelvic floor exercise.



**Vajrasana:** Kneel on the floor and sit Straight on flat toes, place hands on the knees and close the eyes. Breath normally and fix attention on breath. Practice for few minutes.



This is the only asana, which can be practiced after me for 5 minutes to enhance the digestive function. It is good for digestive disorder, pelvic muscles, genitals, hydrocele in men, menstrual disorders, and also redirects sexual energy for spiritual purposes.



**Shashankasana:** Sit in vajrasana, inhale and raise the hand above head and then exhale while bending the trunk forward from the hip. At the end of the movement the hands and forehead should rest on the floor. Repeat it 3 to 5 times.

It regulates the function of adrenal gland, tones pelvic muscles and is beneficial for both male and female reproductive organ.



**Ushtrasana:** Sit on vajrasan. Stand on the knees with the arms at the sides. Lean backwards slowly, try to touch the heel. Do not strain. Stay in this position for comfortable time and come back slowly by releasing the hands from the heels, one at a time. Breathe normally.

It improves posture, and is useful for digestive system, reproductive system, respiratory system and regulates thyroid gland.



**Mandukasana:** Make fists of both hands, place joints of thumbs on the navel. Press both fists against abdomen and with exhalation start bending forward and lift head up. Stay in final position according to your comfort. Inhale and lift your trunk up and resume original position. Repeat it 3 to 5 times.

Massages vital organs and also reproductive organ.



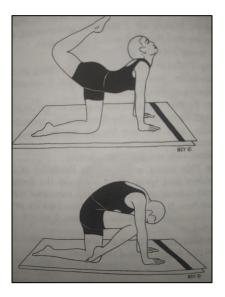
**Marjariasana:** Sit in vajrasana. Raise the buttocks and stand on the knees. Lean forward and place the hands in line with the knees. Make a distance between two knees. Now start inhaling while raising the head and depressing the spine so that the back becomes concave. Who is the breath in this position for 2 seconds, then exhale, while lowering the head and stretching the spine upward. Hold the breadth for 2 second and repeat the same process 5 to 10 times as comfortable.

It gently tones the female reproductive system, giving relief from menstrual cramps and leucorrhoea, backache.



**Viyagrasana:** Sit in vajrasana. Take a position, stand on knees and hands, arching the back downwards, straightening the right leg stretching it up and bend back from knee and look up. Bring toes back of the head. Who is the breath for few seconds in this position and then straighten the right leg bend the knee and swing the leg under the hips. Simultaneously arch the back up and bend the head down bringing the knee towards the nose. Hold breath and positionfor a few second and return slowly to original position. Repeat the same process with another leg. Perform this awesome 3 to 5 times with each leg.

It stretches the abdominal region, promotes digestion and stimulates blood circulation in that region including reproductive organs. Gives good impact on spinal nerves, legs and hip joints.



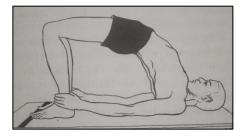
**Bhujangasana:** Lie flat on the stomach with the leg straight, feet together and the soles of the feet uppermost. Place the palms of the hands flat on the floor. Rest the forehead on the floor and close the eyes, let relax the whole body, slowly raise the head and gently tilt the head backward. Partially straighten the elbows to make the arch at back. Inhale wire raising the torso, retain the breath in final position. To return exhale while lowering the torso and release upper back by bending the arms and forehead to the floor. Practice up to 5 rounds.

It helps to remove backache, it tones the ovaries and uterus, helps in menstrual and some other gynecological disorders, stimulate the appetite alleviates constipation and beneficial for all the abdominal organs, especially liver and kidney.



**Setu bandhasana:** Lie flat on the back. Bend the knees, placing the souls of the feet flat on the floor with the heels touching the buttocks. Grip the ankle with the hands. Now, inhale and raise the buttocks and arch the back upward. Raise the chest as high as possible, body is supported by the head, neck, shoulders, arms and feet. Hold the pose and retain the breath for as long as is comfortable, and then come back to the original position by exhaling. Releasing ankles and relax with legs outstretched. Practice 5 to 10 rounds.

This asana is useful for the management of menstrual disorders, prolapse, asthma, backache,



indigestion and thyroid condition.

**Tadasana:** Stand with the feet together or about 10 cm apart as comfortable and the arms by the sides. Inhale and raise the arms over the head. Interlock the fingers and turn the palms upward, at the same time, raise the heel also, coming up on to the toes. Fix the eyes at a point on the wall slightly above the level of the head. Stretch the whole body from top to bottom without losing balance. Hold the breath for few second in this position and come back lowering the heels, exhale, bring hands down slowly. Relax for few seconds and practice for 5 to 10 times.

This asana develops physical and mental balance. It stretches the rectus abdominal muscle and intestine.



**Vrikshasana:** Stand straight and keep hands by the sides. Join hands like prathna mudra. Now keep right foot flat on root of the left thighs. Make balance and look straight. Maintain position as far as comfortable. Breath normally.

This asana develops mind -body balance.



## Yogic exercise during IVF and IUI process:-

#### Only low impact exercise like -

Sukshma Vyayam i.e. practice number (1-9),

Pranayama (only deep breathing, Anulom -vilom and Brahmari pranayama) and, meditation should be practiced.

#### **Breathing exercise (Pranayama):**

The breath is the most vital process of the body. It influences the activities of each and every cell and, most importantly, is intimately linked with the performance of the brain. Rhythmic, deep and slow respiration stimulates and is stimulated by calm, content, state of mind.

Benefits of breathing exercise –

- **1.** Strengthen the immune system.
- **2.** Provide sufficient oxygen to mother and baby, thus manages shortness of breath during pregnancy.
- **3.** Removes waste products such as carbon dioxide and other toxic gases from the body.
- **4.** Manage stress hormones and prepares for stress-free and easy labour.
- **5.** Enhance blood circulation in the body.
- **6.** Generates positive hormones in the body.
- **7.** Providing adequate oxygen to the baby, it saves baby from hereditary disease and undeveloped brain.
- **8.** It gives good physical, mental and emotional health to both (mother and baby).



## **Deep breathing:**

Sit in comfortable position, with back straight, hands on knee or Gyan mudra. Close the eyes and relax the whole body. Take a deep breath in, using full capacity of lungs. Breathing process should be very slow that it should synchronise count (1,2,3,4), both inhaling and exhaling. Retention of breath should be of at least one second. Do not suffocate yourself while practicing.

Can also be done during stress and short breath.





**Anulom-vilom Pranayama (alternative breathing):** 

In this technique, the basic pattern of alternate nostril breathing is established. Close the right nostril with the thumb and inhale through the left nostril, breathe deeply without strain. At the same time, count 1. Om,2.om,3.om..,until inhalation ends comfortably. Now close left nostril with ring finger, exhale through right nostril slowly. Concentrate on breath. This is one round. Practice for 10 to 15 minutes.

It balances nervous system and gives all the benefits of Pranayama.

#### **Brahmari Pranayama (Humming Bee breath):**

Sit in a comfortable meditation pose. Relax the whole body. The lips should remain gently closed with teeth slightly separated throughout the practice. Close the ears using index or middle finger, bring the awareness to the centre of the head. Inhale deeply, and then exhale slowly in a controlled manner while making a deep steady Humming sound like that of the Blackbee. The humming should be smooth, even and continuous, for the duration of the exhalation. Relax the hands back on the knees. Repeat it three times. It releases stress, migraine and cerebral tension and prepares for meditation.

These are the safe Pranayama which can be practiced in any health disorder.

In addition to these, Kapalbhati Pranayama, bhastrika Pranayama, shitli ,shitkari Pranayama all type of Pranayama are recommended but should be practiced before consulting doctor or yog therapist.

# **Maintain good posture during IVF Standing**

- Hold your Head Up straight
- Shoulder blades retracted, chest forward.
- Spine straight
- Knee Not be flexed
- Toe pointed forward

# **Sitting**

When seated, try to elevate your feet and Make sure your chair offers good back support. Use a lumbar pillow for additional low back support.

# **Sleeping**

Try sleeping on your side, not your back, with pillows tucked beneath your belly and between your knees for gentle support.

