

Heartland Kinbaku Rope Bottoms Physical Preparation and Maintenance Program

Written by Zach/Sweetzephyr in consultation with Dr. James Lee

www.heartlandkinbaku.com
www.oaklandropecollective.com
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Introduction

This guide is intended to be a resource to help people of all gender identities and body types become more comfortable exploring Japanese rope bondage and address common physical accessibility issues I've encountered while teaching kinbaku. The exercise program was developed in consultation with Dr. James Lee, a physical therapist practicing in Chicago.

I became interested in particularly harsh and restrictive forms of kinbaku during a time of rapid cultural evolution in the rope scene. Over the last few years, there has been an increasing focus on issues of accessibility, and, relatedly, diversity, in rope. Many examples of high-profile tying pairs around the world, particularly during the early and middle 2010s, have been cis male rope tops and petite, flexible, cis female rope bottoms. As kinbaku has increased in popularity in the West, many people have begun advocating for a more inclusive approach to rope education. Such an approach values making rope accessible to as many people as possible, and embraces a more diverse range of individuals in whatever tying role appeals to them.

This movement appealed to me and resonated with my values. For the last several years, I have reflected on what I can do to contribute to this evolution in my own practice and teaching. I have sought to honor the tradition of harsh semenawa-style rope that I love studying and practicing, while empowering people to explore it via greater accessibility.

I have generally taught in local community formats that involve progressive weekly classes, and worked hard to make sure my classes were welcoming to anyone who might seek them out. Thus far, that effort has mostly centered around a structured core curriculum with variations offered to try to meet most people where they are, and a high teacher-to-student ratio, with teaching assistants who could give individualized attention and customized variations for folks who found the standard set of variations

unsuitable for them.

I've found some limitations with that approach, specifically with respect to the common upper body ties in kinbaku: the TK and strappado. The styles and lineages I've been most drawn to, and which most inform my teaching, rely heavily on these positions, which unfortunately cause accessibility challenges fairly frequently. Many individuals find they don't have the range of motion to put their arms behind their back in these positions, or if they do, find them to be acutely painful and/or unsustainable

Much of my study – both in learning from my teachers and through the development of my own techniques and approaches to tying these positions – has focused on adapting how the patterns are tied. Additionally, I've identified a set of partnered myofascial release exercises that do not resolve the underlying physical issues, but, when used immediately before tying, can temporarily create enough ease and space to allow the tie to be sustained and enjoyed. I'm not a health professional or a trained bodyworker, but I've had enough experience being treated for my own injuries to come up with a few techniques for rope that helped a bit.

However, I've hoped to find a suitable medical professional to help put together a more medically informed program designed to physically prepare rope bottoms for the types of stress they put on their bodies; to increase comfort and decrease undesirable kinds of pain in kinbaku tying positions; and to help make the practice physically accessible and sustainable for many years - not just during our 20s.

I ran into an exceptionally gifted physical therapist in my local rock climbing community in Chicago. I've seen a handful of PTs in the past 15 years, but generally never got results that were transformative or significantly different from just resting off an injury, particularly climbing-specific injuries.

One session with Dr. James Lee completely transformed how I climbed – and alleviated chronic pain and injuries that had plagued me for many years. I had similar results from working with him for other sources of chronic pain. Though he is not a member of the rope community, he seemed open-minded, and I approached him to ask if he would be open to working with kinbaku practitioners and helping me to develop a general program for people who get tied.

The following program was developed based on his work with 10 or so of my students who struggled with range-of-motion issues, experienced pain in tying positions, or experienced pain associated with hypermobility. In preparation for working with them, my partner and I demonstrated a typical kinbaku suspension in his office, so he could get a sense of what we are doing and how it impacts the body.

As a disclaimer, I am not a licensed practitioner of any health science, and this is not medical advice. This is a general program intended to address issues Dr. Lee has identified as being at the root of many rope bottoms' challenges in kinbaku. If you have specific issues or individual concerns, consider seeking out a PT in your area, or contact [Dr. Lee](#) for a telehealth consultation or in-person session in Chicago.

For rope bondage-specific issues, there probably are few PTs as knowledgeable as Dr. Lee. Based on his experience working on my students, he is able to offer highly effective individual diagnosis and treatment even via telehealth sessions.

The Program

General Philosophy and Approach

The intent of this program is two-fold: first, to provide a set of exercises designed to address some of the most common obstacles for people who want to be tied; and second, to offer a more generalized program to minimize the risk of future injuries and to keep rope bottoming accessible for as long as people want to be tied (no matter how long they've been doing it or how old they are!).

The exercises will be grouped up based on that intent. We'll cover the generalized program first, and then present exercises that could be beneficial to people facing common specific issues: difficulty with range of motion placing the arms in the correct position for TKs; acute, quick-onset shoulder pain in TK position; and pain associated with hypermobility.

There are also a couple of exercise suggestions for people who struggle with backbends and people who experience neck pain, particularly in face-up positions.

This is a work in progress and will be updated over time based on new experiences among my students and additional issues and solutions we identify with Dr. Lee.

If you try this program, please contact me at info@heartlandkinbaku.com to report your experience and help me improve the program.

General Notes on the Exercises

For people struggling with acute issues that prevent them from rope bottoming sustainably for the ties they'd like to be tied in, **Dr. Lee recommends that you do the set of exercises related to your issue every day for about 4 weeks.** If you are experiencing the pain or range of motion issue on only one arm, focus on doing the exercises on just that side initially.

After about 4 weeks, you can drop the frequency down to 2 or 3 times a week, and consider trying more advanced / challenging versions of the exercises as described in each section. If you were doing the exercises on just one arm, you can add the second arm in at this point to continue the program for physical maintenance/injury prevention.

For people who aren't currently experiencing any barriers to how they want to tie but want to take care of their bodies in advance and reduce the risk of future injury, twice a week should be sufficient, stepping up from the easier versions of the exercises to the harder ones over time as the initial variations start to feel easy.

The programs Dr. Lee designs are generally focused on developing muscular strength and improving neuromuscular activation. While there are some passive stretches included in the program, Dr. Lee believes most of the issues he's encountered in rope bottoms are best addressed through active exercises.

When doing the exercises, make sure you hold the exercise for the specified duration (usually 5 or 10 seconds) and that you hold at the maximum end range of the movement as shown in the videos.

Holding the movement at that end range for these time periods is going to be more beneficial than just doing quick repetitions.

General Injury Prevention and Body Maintenance Program

The following exercises are a selection from the specific programs that are likely to be beneficial to anyone who likes to be tied. They should help minimize the risk of experiencing muscular or joint injuries during kinbaku, as well as make the positional component of these ties more stable and sustainable.

The focus here is on general strengthening of the small internal rotation muscles, subscapularis and teres major; the external rotation muscles; and the muscles of the upper back.

Strengthening the internal rotators will help your shoulder maintain a stable, neutral position when being tied in a TK. When the internal rotators are weak, the humeral head (top of the upper arm bone) tends to shoot forward in the shoulder joint, which can cause pain in the surrounding muscles, tendons, and nerves. The way the upper bands of a TK press against this already highly strained position is responsible for a lot of the shoulder pain people experience in TKs.

Strengthening the external rotator muscles will also help to support your shoulder joint.

Strengthening the upper back will help maintain a more neutral posture (most of us tend to hunch forward from computer/phone use and sitting at desks) by training the scapula (shoulder blades) to engage back and up. This helps to strengthen the core and the muscles in the cervical spine (the neck), which creates more security and stability. It also trains the scapular elevation muscles in the upper back to engage more.

This positioning allows the arms to be placed in TK position with less strain on the shoulder girdle and neck.

Exercise 1: Wall Internal Rotation Press Exercise

1. Photo



a.

2. [Video](#)

3. [Video](#) of rear view of what the arm should be doing

4. Protocol

- a. 5 second holds, 10 times

5. Instructions

- a. Stand with your feet hip distance apart and your back to the wall.
- b. Initially, you may find you need to stand with your feet right up against the wall.
 - i. Over time, you can increase the difficulty by keeping your back pressed against the wall but stepping your feet forward and increasing the pressure
- c. Place your hand behind your back, with your palm pressed flat against the wall.
- d. Your hand should be about in the center of your lower back (your lumbar spine, above your sacrum/butt).

- e. Your elbow should be a few inches out to the side of your body.
- f. The elbow should not touch the wall - the palm should be the only contact
- g. Press with your palm against the wall to push the rest of your body away from the wall by engaging your internal rotators - not by pressing your forearm straight against the wall
- h. Hold for 5 seconds, repeat 10 times

Exercise 2: Lying Down Internal Rotation Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times

4. Instructions

- a. Lie down at the edge of a bed or couch with the arm you're working on hanging straight down.
- b. Bring the other arm up and around to support the forehead in a neutral position
- c. Engage the shoulder blade back

- d. Try to keep the elbow as low as possible
- e. From that position, use internal rotation motion to try to lift the hand as much off the back as you can
- f. Hold for 5 seconds
- g. Lower the arm straight down to the ground to reset, and repeat

Advanced Internal Rotator Exercise Variation

1. Note: this variation on internal rotation exercises is more challenging and would make sense to graduate to after some time of doing the wall and lying down versions of this exercise

2. Photo



a.

3. [Video](#)

4. Protocol

- a. 5 second holds, 10 times

5. Instructions

- a. Attach a resistance band (or use a cable machine at the gym) to a pole above head height. If at home, you could try attaching it to one side of a doorknob, running it over the top of the door, and closing the door to anchor it up high.
- b. Face the direction the cable is coming from and grab it with an overhand grab
- c. Rotate about 45 degrees away from the side you're holding the cable on

- d. Reach your hand behind your back with the hand in center of your low back
- e. Lift the hand away from the back

Excercise 3: Wall Angel External Rotation Exercise

1. Photo



2. [Video](#)

3. Protocol

- a. 30 seconds of rapid pivoting in the higher position and lower position as shown in the video

4. Instructions

- a. Stand with your back flat against the wall. Feet against the wall, butt and shoulders flat against the wall

- b. Open your arms out to the sides with your palms facing away from you with elbows bent at 90 degrees and press the top side of your arms against the wall
- c. Avoid letting the chest arch and pull off the wall
- d. Slide up as high as you can while still maintaining full contact with hands, wrist, elbow, shoulder, and low back
- e. Slide up and down an inch or so in either direction for 30 seconds, pivoting through the shoulder joint
- f. Slide down so the elbows are about 6 inches out from the rib cage and do another 30 seconds of pivoting

Exercise 4: Side Lying External Rotation Exercises

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times at each of the 3 angles (if the first one is easy)

4. Instructions

- a. Lie on a bed, couch, or floor sideways, with your hips and shoulders leaning slightly to the front
- b. Hold the upper arm against the rib cage and bend the elbow at 90 degrees
- c. Rotate the arm externally to lift the forearm up and away from the body

- d. For increased difficulty, you can raise the arm forward towards the head and repeat at higher angles

Exercise 5: Bar Shrug Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 seconds holds, 10 times
- b. To increase difficulty, use a weighted bar

4. Instructions

- a. Stand with feet about hip distance apart
- b. Bend slightly at the knees and waist
- c. Grip a bar or broom stick with a grip about 1 foot wider than the shoulders on each side
- d. Maintain a neutral head position - don't let the chin lift up or shoot forward
- e. Shrug the scapula back and up

Exercise 6: Bar Overhead Press Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times
- b. To increase difficulty, use a weighted bar

4. Instructions

- a. Stand with feet about hip distance apart
- b. Bend slightly at the knees and waist
- c. Grip a bar or broom stick with a grip about 1 foot wider than the shoulders on each side
- d. Maintain a neutral head position - don't let the chin lift up or shoot forward
- e. Bring the bar overhead and extend the arms fully
- f. Shrug the scapula up
- g. Bring back behind the head to reset

Exercise 7: Bar High Pull Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times
- b. To increase difficulty, use a weighted bar

4. Instructions

- a. Stand with feet about hip distance apart
- b. Bend slightly at the knees and waist
- c. Grip a bar or broom stick with a grip about 1 foot wider than the shoulders on each side
- d. Maintain a neutral head position - don't let the chin lift up or shoot forward
- e. Pull the bar into the center of your chest by squeezing the scapula together
- f. The highest peak should be the elbows up and back behind you

Issue-Specific Program #1: Pain in TK Position

This program is intended to address one of the more common issues I've encountered while teaching. Many individuals find that they have the range of motion to put their arms behind their back in a middle or high hands TK position, but within a short period of time, they experience sharp pain in one or both shoulders.

Dr. Lee believes this is likely to be caused by weakness in the internal rotator muscles. Strengthening the internal rotators will help your shoulder maintain a stable, neutral position when being tied in a TK. When the internal rotators are weak, the humeral head (top of the upper arm bone) tends to shoot forward in the shoulder joint, which can cause pain in the surrounding muscles, tendons, and nerves. The way the upper bands of a TK press against this already highly strained position is responsible for a lot of the shoulder pain people experience in TKs.

Strengthening the external rotator muscles will also help to support your shoulder joint.

Exercise 1: Wall Internal Rotation Press Exercise

6. Photo



a.

7. [Video](#)

8. [Video](#) of rear view of what the arm should be doing

9. Protocol

- a. 5 second holds, 10 times

10. Instructions

- a. Stand with your feet hip distance apart and your back to the wall.
- b. Initially, you may find you need to stand with your feet right up against the wall.
 - i. Over time, you can increase the difficulty by keeping your back pressed against the wall but stepping your feet forward and increasing the pressure
- c. Place your hand behind your back, with your palm pressed flat against the wall.

- d. Your hand should be about in the center of your lower back (your lumbar spine, above your sacrum/butt).
- e. Your elbow should be a few inches out to the side of your body.
- f. The elbow should not touch the wall - the palm should be the only contact
- g. Press with your palm against the wall to push the rest of your body away from the wall
- h. Hold for 5 seconds, repeat 10 times

Exercise 2: Lying Down Internal Rotation Exercise

5. Photo



a.

6. [Video](#)

7. Protocol

- a. 5 second holds, 10 times

8. Instructions

- a. Lie down at the edge of a bed or couch with the arm you're working on hanging straight down.
- b. Bring the other arm up and around to support the forehead in a neutral position

- c. Engage the shoulder blade back
- d. Try to keep the elbow as low as possible
- e. From that position, use internal rotation motion to try to lift the hand as much off the back as you can
- f. Hold for 5 seconds
- g. Lower the arm straight down to the ground to reset, and repeat

Advanced Internal Rotator Exercise Variation

- 6. Note: this variation on internal rotation exercises is more challenging and would make sense to graduate to after some time of doing the wall and lying down versions of this exercise

- 7. Photo



a.

- 8. [Video](#)

- 9. Protocol

- a. 5 second holds, 10 times

- 10. Instructions

- a. Attach a resistance band (or use a cable machine at the gym) to a pole above head height. If at home, you could try attaching it to one side of a doorknob, running it over the top of the door, and closing the door to anchor it up high.
 - b. Face the direction the cable is coming from and grab it with an overhand grab

- c. Rotate about 45 degrees away from the side you're holding the cable on
- d. Reach your hand behind your back with the hand in center of your low back
- e. Lift the hand away from the back

Excercise 3: Wall Angel External Rotation Exercise

5. Photo



a.

6. [Video](#)

7. Protocol

- a. 30 seconds of rapid pivoting in the higher position and lower position as shown in the video

8. Instructions

- a. Stand with your back flat against the wall. Feet against the wall, butt and shoulders flat against the wall

- b. Open your arms out to the sides with your palms facing away from you with elbows bent at 90 degrees and press the top side of your arms against the wall
- c. Avoid letting the chest arch and pull off the wall
- d. Slide up as high as you can while still maintaining full contact with hands, wrist, elbow, shoulder, and low back
- e. Slide up and down an inch or so in either direction for 30 seconds, pivoting through the shoulder joint
- f. Slide down so the elbows are about 6 inches out from the rib cage and do another 30 seconds of pivoting

Exercise 4: Side Lying External Rotation Exercises

5. Photo



a.

6. [Video](#)

7. Protocol

- a. 5 second holds, 10 times at each of the 3 angles (if the first one is easy)

8. Instructions

- a. Lie on a bed, couch, or floor sideways, with your hips and shoulders leaning slightly to the front
- b. Hold the upper arm against the rib cage and bend the elbow at 90 degrees
- c. Rotate the arm externally to lift the forearm up and away from the body

- d. For increased difficulty, you can raise the arm forward towards the head and repeat at higher angles

Issue Specific Program #2: Insufficient Range of Motion (Can't place arms far enough behind the back)

This program addresses another common issue I've encountered in my classes - individuals who would like to be tied in the TK position, but when they attempt to put their arms behind their back, they can't get their forearms to a parallel or higher position (and yes, we offer low hands variations, but often that is also challenging for these people, and that variation has some drawbacks technically that can aggravate the kinds of shoulder issues that people who are likely to need it might have) at all, or if they can, they can't cross their forearms far enough to be able to receive a single column around the forearms that isn't right on the wrist or hands.

Dr. Lee believes this issue is likely to be caused by tightness in the internal rotator muscles, tightness in the thoracic (middle, chest area) spine. The tight internal rotator muscles prevent the arm from rotating and moving behind the back to the desired position. The internal rotator mobilization exercises help address this issue.

Tightness in the thoracic spine may contribute to this as well. Those of us who work at a desk or use computers often tend to have forward hunched postures. This posture makes it more difficult for the arms to internally rotate and move behind the back. The thoracic spine lift exercise and the static stretches help address this issue.

This program has exercises designed to increase range of motion, including some static stretching. Individuals with this issue might find they benefit from the rotator cuff exercises in the general program as well. If combining these, do the static stretching exercises last.

Exercise 1: Range of Motion Self Assessment and Mobilization Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 8 second holds, 4 times

4. Instructions

- a. Lie sideways on a bed or the floor
- b. Position your bottom arm with the shoulder extended perpendicular to the chest
- c. Bend the elbow 90 degrees with the fingers pointed at the ceiling
- d. Without changing the angle of the shoulder or elbow,
- e. Try to touch your fingers to the floor
- f. If you can touch easily, you have good range of motion.
- g. If you feel stiff or stuck at a higher angle, do the following mobilization exercise
 - i. Place your top hand on the top of your wrist
 - ii. With your bottom hand, actively lift up and away from the floor
 - iii. Resist with your top hand and don't let the bottom hand move
 - iv. Hold for 8 seconds and relax a moment
 - v. Repeat 4 times

Exercise 2: Thoracic Extension Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times

4. Instructions

- a. Sit at the edge of a chair or bed
- b. Lean forward about 30 degrees so your lumbar spine does not flex back during the exercise
- c. Clasp hands behind the neck and squeeze elbows together pointing forward
- d. Without leaning any further back, lift the elbows and try to point them at the ceiling

Exercise 3: Rope Passive Stretch

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 1 minute holds, 3 times

4. Instructions

- a. Drape a rope or cord over your shoulder hanging towards your back on one side. Using a thick bundle of rope or putting a knot in it will help maintain grip
- b. Reach the opposite arm behind your back in a TK position and grab the rope in a fist with the thumb side up
- c. With the upper arm, pull the cord up over your shoulder until the bottom arm gets to the maximum height it can reach
- d. Bring the upper arm down in front of your body and hold for 1 minute, take a rest, and repeat 3 times.

Exercise 4: Thoracic Passive Stretch

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 10 second holds, 10 times

4. Instructions

- a. Stand 3-4 feet away from the wall and place your palms against the wall shoulder distance apart
- b. Keep your arms straight and stick your butt out behind you, letting your chest sink down
- c. You should feel the stretch in your mid back

Issue #3: Hypermobility

Hypermobility is another challenge I've encountered in students. It's less common than mobility and pain barriers, but it can be a difficult issue to troubleshoot for kinbaku. With hypermobility, people frequently can be placed into a position easily, but once they are suspended, the force on their hypermobile joints causes the joint to move in a way that it shouldn't, which can be sharply painful and possibly cause acute or accumulated tissue damage and injury.

Dr. Lee believes that with hypermobility in kinbaku, the most important thing is to strengthen the muscles around the shoulder joint so that you have the strength to keep the joint in a safe position when it is loaded.

As such, to address these needs, all of the internal rotator, external rotator, and shoulder girdle strengthening exercises from the general prevention program are recommended.

Exercise 1: Wall Internal Rotation Press Exercise

1. Photo



a.

2. [Video](#)

3. [Video](#) of rear view of what the arm should be doing

4. Protocol

- a. 5 second holds, 10 times

5. Instructions

- a. Stand with your feet hip distance apart and your back to the wall.
- b. Initially, you may find you need to stand with your feet right up against the wall.
 - i. Over time, you can increase the difficulty by keeping your back pressed against the wall but stepping your feet forward and increasing the pressure
- c. Place your hand behind your back, with your palm pressed flat against the wall.

- d. Your hand should be about in the center of your lower back (your lumbar spine, above your sacrum/butt).
- e. Your elbow should be a few inches out to the side of your body.
- f. The elbow should not touch the wall - the palm should be the only contact
- g. Press with your palm against the wall to push the rest of your body away from the wall. Press by engaging your internal rotation muscles - not by pressing your forearm flat against the wall.
- h. Hold for 5 seconds, repeat 10 times

Exercise 2: Lying Down Internal Rotation Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times

4. Instructions

- a. Lie down at the edge of a bed or couch with the arm you're working on hanging straight down.

- b. Bring the other arm up and around to support the forehead in a neutral position
- c. Engage the shoulder blade back
- d. Try to keep the elbow as low as possible
- e. From that position, use internal rotation motion to try to lift the hand as much off the back as you can
- f. Hold for 5 seconds
- g. Lower the arm straight down to the ground to reset, and repeat

Advanced Internal Rotator Exercise Variation

1. Note: this variation on internal rotation exercises is more challenging and would make sense to graduate to after some time of doing the wall and lying down versions of this exercise

2. Photo



a.

3. [Video](#)

4. Protocol

- a. 5 second holds, 10 times

5. Instructions

- a. Attach a resistance band (or use a cable machine at the gym) to a pole above head height. If at home, you could try attaching it to one side of a doorknob, running it over the top of the door, and closing the door to anchor it up high.

- b. Face the direction the cable is coming from and grab it with an overhand grab
- c. Rotate about 45 degrees away from the side you're holding the cable on
- d. Reach your hand behind your back with the hand in center of your low back
- e. Lift the hand away from the back

Excercise 3: Wall Angel External Rotation Exercise

1. Photo



2. [Video](#)

3. Protocol

- a. 30 seconds of rapid pivoting in the higher position and lower position as shown in the video

4. Instructions

- a. Stand with your back flat against the wall. Feet against the wall, butt and shoulders flat against the wall
- b. Open your arms out to the sides with your palms facing away from you with elbows bent at 90 degrees and press the top side of your arms against the wall
- c. Avoid letting the chest arch and pull off the wall
- d. Slide up as high as you can while still maintaining full contact with hands, wrist, elbow, shoulder, and low back
- e. Slide up and down an inch or so in either direction for 30 seconds, pivoting through the shoulder joint
- f. Slide down so the elbows are about 6 inches out from the rib cage and do another 30 seconds of pivoting

Exercise 4: Side Lying External Rotation Exercises

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times at each of the 3 angles (if the first one is easy)

4. Instructions

- a. Lie on a bed, couch, or floor sideways, with your hips and shoulders leaning slightly to the front
- b. Hold the upper arm against the rib cage and bend the elbow at 90 degrees

- c. Rotate the arm externally to lift the forearm up and away from the body
- d. For increased difficulty, you can raise the arm forward towards the head and repeat at higher angles

Exercise 5: Bar Shrug Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 seconds holds, 10 times

4. Instructions

- a. Stand with feet about hip distance apart
- b. Bend slightly at the knees and waist
- c. Grip a bar or broom stick with a grip about 1 foot wider than the shoulders on each side
- d. Maintain a neutral head position - don't let the chin lift up or shoot forward
- e. Shrug the scapula back and up

Exercise 6: Bar Overhead Press Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times

4. Instructions

- a. Stand with feet about hip distance apart
- b. Bend slightly at the knees and waist
- c. Grip a bar or broom stick with a grip about 1 foot wider than the shoulders on each side
- d. Maintain a neutral head position - don't let the chin lift up or shoot forward
- e. Bring the bar overhead and extend the arms fully
- f. Shrug the scapula up
- g. Bring back behind the head to reset

Exercise 7: Bar High Pull Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times

4. Instructions

- a. Stand with feet about hip distance apart
- b. Bend slightly at the knees and waist
- c. Grip a bar or broom stick with a grip about 1 foot wider than the shoulders on each side
- d. Maintain a neutral head position - don't let the chin lift up or shoot forward
- e. Pull the bar into the center of your chest by squeezing the scapula together. The highest peak should be the elbows up and back behind you

Issue #4: Scapular ‘Winging’

This is more of a niche issue, but one positional stress I’ve observed students experiencing is noticing when their scapula pop dramatically off the back when their arms are placed in TK position.

There are various medical issues associated with scapular winging. It can be due to an injury to specific nerves that innervate the muscles controlling the scapula. However, this is most likely not the case for you. With your arms straight out in front of you, if you have the ability to move your shoulder blade up, down, forward and backwards, then you do not have nerve damage. But when you are placed in specific kinbaku positions and someone notices your shoulder blade winging, it is most likely due to a lack of motor control.

These exercises will help to give you a better awareness of your shoulder blade and provide better control when placed in TKs.

Exercise 1: Scapular Protraction Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times
- b. For additional difficulty, do it on your knees instead of hips, or on your feet with your entire body elevated

4. Instructions

- a. Lie face down and place your elbows shoulder width apart about 6-8 inches in front of your shoulders, with the forearms pointing straight ahead
- b. Keeping your hips on the ground, press through your elbows to protract your scapula (push them forward)

Issue #5: Neck Pain in Face Up Ties

Many of my students struggle with neck pain, particularly in face up ties. With side suspension and face down suspension, hair rope or tenuguis around the face can add head support in ways that are aesthetic and add to the sensation of the tie.

I've not been able to find a way of providing a similar type of head support in face up position. The only option I've found that works is wrapping the tenugui around the back of the head and tying it at the face, creating a 'babushka' like aesthetic that not everyone enjoys, and also creating a big knot near the eyes or nose that might not feel great for the bottom.

This exercise can help strengthen the deep neck flexors and make hanging the head backwards more sustainable.

Exercise 1: Neck Flexion Exercise

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 10 second holds, 10 times

4. Instructions

- a. Lie flat on your back on a flat surface
- b. Roll up a small towel tightly and put it behind your neck
- c. Shrug the scapula up slightly
- d. Flex the chin down

Improving Sustainability in Backbends

Many kinbaku ties involve pretty harsh backbends that can often be a barrier to many students I've worked with. These exercises are designed to help improve sustainability and access to these positions for individuals who would like to be tied this way.

Dr. Lee believes that since maintaining abdominal engagement to protect the spine isn't really practical for the amount of time many ties will last, the next best thing is to strengthen the muscles that support the lower back.

Exercise 1: "Superman" Holds

1. Photo



2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times

4. Instructions

- a. Lie on your stomach on the floor
- b. For the easiest variation, keep your upper body still and clench your butt and engage your lower back to lift the legs up.
- c. Keep your chin down so the spine is neutral
- d. Keep your legs straight and squeezed together

- e. To increase difficulty, straight arms overhead and lift upper body as well

Exercise 2: Hip Bridges

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second holds, 10 times

4. Instructions

- a. Lie on the floor
- b. Feet hip distance apart
- c. Squeeze your glutes together and engage your lower back to lift the hips up

Exercise 3: Boat Pose Holds

1. Photo



a.

2. [Video](#)

3. Protocol

- a. 5 second hold, 10 times

4. Instructions

- a. Lie face down on the floor or a mat
 - i. Reach behind you with your thumbs towards the floor and grip around each ankle
 - ii. Flex the feet and kick into the hands, while also pulling through the arms and the entire upper body