

INSTRUCTIONS FOR SURGERY

In order to make your admission and hospital stay smooth and more pleasant, please comply with the following instructions:

- ☐ If your surgery is on **MONDAY**, please report to:

NYU Langone Orthopedic Hospital
301 East 17th Street
New York, NY 10003

If indicated by your physician, schedule your pre-surgical testing, located at

303 2nd Avenue, 1st Floor Suite 16
New York, NY 10003

- ☐ If your surgery is on **FRIDAY**, please report to:

NYU Langone Outpatient Surgery Center
339 East 38th Street
New York, NY 10016

If indicated by your physician, please call 212-263-5985 to schedule your pre-surgical testing, located at

240 East 38th St.
New York, NY 10016
Mezzanine Level

***One business day prior to your surgery, hospital staff will contact you to finalize your surgery time.**

- A. Bring jogging/warm-up pants, shorts/skirt if having knee surgery.
- B. Bring a shirt/blouse that buttons open in front instead of a pullover if having shoulder/elbow surgery.
- C. If you own crutches, bring them with you, if having knee, ankle or hip surgery.
- D. Bring all medications or a list of current medications you are taking with you. Also bring a list of any allergies.
- E. Blood pressure medication should be taken as usual with a sip of water the morning of surgery. **DO NOT** take a diuretic or fluid pill. Seizure medications may be taken before surgery.

- F. **DO NOT** take oral diabetes medications (pills) the night before or the day of surgery. If you are on insulin, **DO NOT** use insulin the morning of surgery unless you are a "problem diabetic" in which case you need to consult your physician regarding the proper insulin dose for you to use prior to surgery.
- G. Please **DO NOT** wear makeup or nail polish the day of surgery. You will need to remove contact lens (including extended wear), denture, or bridges prior to surgery. Please bring your own containers for storage.
- H. Leave all jewelry and valuables at home. The hospital will not take responsibility for lost or missing items.
- I. You need to report any skin irritation, fever, cold, etc., to Dr. Jazrawi.
- J. You will need to bring your insurance card/information with you.
- K. **DO NOT** eat, drink (including water), chew gum, candy, smoke cigarettes, cigars, use smokeless tobacco, etc., after midnight the night before surgery or the morning of your surgery. The only exception is a sip of water to take necessary medications the morning of surgery.
- L. You must arrange someone to drive you home when ready to leave the hospital. You will not be allowed to drive yourself home after surgery. We can assist you if you need transportation to the airport or hotel, however, you need to let us know in advance (if possible) so we can make the arrangement.
- M. NOTE: **DO NOT** take any aspirin, aspirin products, anti-inflammatories, Coumadin or Plavix at least 5 days prior to surgery. You are allowed to take Celebrex up to your day of surgery. If your medical doctor or cardiologist has you on any of the above medications. Please check with him/her before discontinuing the medication. You may also take Tylenol or Extra-Strength Tylenol if needed.

Nonsteroidal Anti-Inflammatory (Arthritis) Medications:

Some of the most common names for frequently used NSAID's include: Motrin, Indocin, Nalfon, Naprosyn, Naprelan, Arthrotec, Tolectin, Feledene, Voltaren, Clinoril, Dolobid, Lodine, Relafen, Daypro, Advil, Aleve, Ibuprofen.

Your first follow up appointment is usually scheduled for approximately 2 weeks after your surgery at the 333 East 38th street office. The date and time of your follow-up is _____.

If you cannot make this appointment or need to change the time, please contact the office.

If you have any questions regarding your surgery, please contact the office at 646-501-7223 option 4, option 2 or via the internet at www.newyorkortho.com

Home Supplies For Your Surgery

Laith M Jazrawi, MD

Open Surgery

- A. Open knee surgery** (ACL reconstructions, ALL (Anterolateral ligament) reconstructions, Autologous Chondrocyte Implantation, PCL reconstructions, High tibial osteotomy, Distal femoral osteotomy, Posterolateral corner reconstruction, MCL reconstruction, OATS (osteochondral autograft), Osteochondral allograft)
 - a.** You will need 4x4 (or similar size) waterproof bandages for fourteen days. **Bandage changes for open knee surgery done post-op day #3.**
- B. Open shoulder surgery** , (Biceps Tenodesis, Latarjet, Open capsulorrhaphy, Glenoid reconstruction using Distal tibial allograft):
 - a.** You will need 4x4 (or similar size) waterproof bandages for fourteen days. Also, a box of **Bandage changes for open shoulder surgery are done post-op day #3.**
- C. Open Ankle Surgery** (Achilles Tendon Repair, Os Trigonum Excision, Ankle OCD, Modified Brostrom-Gould Procedure, Peroneus Longus/Brevis Repair)- You do not have to worry about dressing changes as your leg will be in splint/cast for the first two weeks
- D. Open Elbow surgery** (Distal Biceps Repair, LCL Reconstruction, Radial Head or Capitellum ORIF, Radial Head Replacement/Resection, Triceps Repair, UCL Reconstruction – Tommy John Surgery)- You do not have to worry about dressing changes as your arm will be in splint/cast for the first two weeks. **For Tennis Elbow surgery (lateral epicondylitis) and Golfer's Elbow Surgery (medial epicondylitis), dressing changes are started on post-op day #3.** You will need 4x4 (or similar size) waterproof bandages for fourteen days.
- E. Hamstring repair** You will have a special dressing placed on at the time of surgery that will be kept on for the first 2 weeks after surgery. You will then need 4x4 (or similar size) Tegaderm or Telfa waterproof dressings. Also, a box of 4" by 4" gauze sponges if there is bleeding at the incision site.

Arthroscopic Surgery

- A.** For Arthroscopic shoulder, elbow, knee, or ankle surgery:
 - a.** Regular adhesive bandages ("Band-aids") can be used for arthroscopic portals x 2 weeks.
 - b.** **If biceps tenodesis was performed, use 4x4 (or similar size) waterproof bandages on wounds.**
 - c.** **In general, dressing changes for arthroscopy are done on post operative day 3**

Post-Operative Medication Administration

Knee Arthroscopy

- Pain- Motrin 800mg. 1 tab three times daily, as needed
- Adjunctive pain: Percocet (Oxycodone/Acetaminophen) 5/325 (5 tabs); One tab every 6 hours as needed for adjunctive pain*

Meniscal Repair, Meniscal Root Repair

- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed*
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.
- DVT prophylaxis- Aspirin 81mg; 2 tabs daily x 14 days
- ***** Aspirin starts post-operative day #1

Knee Ligament Reconstruction

- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed*
- Antibiotic – Keflex 500mg; One tab 4 times daily x 4 days
 - Keflex allergy – Clindamycin 300mg; One tab twice daily x 7days.
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed (Max 3 tabs)
- DVT prophylaxis- Aspirin 81mg; 2 tabs daily x 28 days
- *****Antibiotics and Aspirin starts post-operative day #1

Non-weight bearing Lower Extremity Surgery (Distal Femoral Osteotomy, High Tibial Osteotomy, Tibial Tubercle Osteotomy, Cartilage Transplant)

- Antibiotic – Keflex 500mg; One tab 4 times daily x 4 days
 - Keflex allergy – Clindamycin 300mg; One tab twice daily x 7days.
- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed*
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed (Max 3 tabs)
- DVT prophylaxis- Aspirin 81mg; 2 tabs daily x 28 days
- *****Antibiotics and Aspirin starts post-operative day #1

Shoulder/Elbow Surgery

- Antibiotic – Keflex 500mg; One tab 4 times daily x 4 days
 - Keflex allergy – Clindamycin 300mg; One tab twice daily x 7days.
- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed*
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.

Ankle fracture surgery & Achilles Tendon Surgery

- Antibiotic – Keflex 500mg; One tab 4 times daily x 4 days
 - Keflex allergy – Clindamycin 300mg; One tab twice daily x 7days.
- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed*
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.
- DVT Prophylaxis - Aspirin 81mg; 2 tabs daily x 28 days
- ****Antibiotics and Aspirin starts post-operative day #1

Ankle arthroscopy +/- Microfracture

- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed*
- DVT Prophylaxis - Aspirin 81mg; 2 tabs daily x 14 days
- ****Aspirin starts post-operative day #1

Hamstring repair

- Antibiotic – Keflex 500mg; One tab 4 times daily x 4 days
 - Keflex allergy – Clindamycin 300mg; One tab twice daily x 7days.
- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed*
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.
- DVT Prophylaxis - Aspirin 81mg; 2 tabs daily x 28 days
- ****Antibiotics and Aspirin starts post-operative day #1

*** No refills of narcotic pain medication will be given.** You must transition to over the counter Aleve or Motrin after your initial course of narcotic pain medication is completed. If you have any stomach issues you may transition to Extra Strength Tylenol instead.

***** HIGH RISK DVT Patients – patients on oral contraceptives, smokers, or history of previous DVT or embolus**

- Will receive
 - Xeralto (Rivaroxaban) 10mg; 1 tab daily x 14 days
 - Followed by aspirin 81mg; 2 tabs daily x 14 days

Post-Operative Instructions

Achilles Tendon Repair

Day of Surgery

- A. Diet as tolerated.
- B. Pain medication as needed every 6 hours.
- C. Icing is important for the first 5-7 days post-op. Ice is applied for 20-minute periods 3-4 times per day. Care must be taken with icing to avoid frostbite.
- D. Set up your physical therapy appointment for 4 weeks after surgery
- E. **Keep leg elevated above heart**

First Post-Operative Day

- A. Continue icing
- B. You will need to keep your cast/splint dry when taking a shower. Do this for about 4 weeks after surgery.

Second Post-Operative Day until return visit

- A. Continue icing
- B. Leg elevation as much as possible

Ankle Support

- A. Weeks 0-2: posterior slab/splint
- B. Weeks 2-4: short leg cast
- C. Weeks 4-6: Aircast walking boot with 2 cm heel lift, weightbearing as tolerated
- D. Weeks 6-8: Remove heel lift
- E. Week 8-12: wean off boot

Call our office @ 646-501-7223 option 4, option 2 to confirm your first postoperative visit, which is usually about 1-2 weeks after surgery. If you are experiencing any problems, please call our office or contact us via the internet at www.newyorkortho.com.

Dr. Laith M. Jazrawi

Chief, Division of Sports Medicine
Associate Professor Department of Orthopaedic Surgery

Rehabilitation After Achilles Tendon Repair

The Achilles tendon is the strongest and thickest tendon in the body. It attaches the calf muscles (soleus and gastrocnemius) to the heel bone (calcaneus). The tendon transmits force from the contracting calf muscles to the calcaneus to cause the foot action of plantar flexion (foot pointed down) that is important in walking, running, jumping and change of direction activities. Although the Achilles tendon is the strongest tendon in the body, it is also the tendon most commonly torn or ruptured. The most common causes of rupture are:

- Sudden plantar flexion (foot moving downward) such as taking off to jump.
- Unplanned or forced dorsiflexion (foot moving upward) such as landing a jump or stepping into a hole.
- Direct trauma to the tendon.

Most Achilles tendon ruptures occur in sports that require running, jumping, and change of direction. The typical age for rupture occurs between 30–40 years of age and is significantly more common in males than females. Older adults can also rupture the Achilles tendon and are more inclined to have degenerative partial tearing of the tendon. Other risk factors for Achilles tendon rupture include use of

Fluoroquinolone antibiotics and direct steroid injections into the tendon.¹

The diagnosis of an Achilles tendon rupture is made from clinical history, physical exam and diagnostic testing. Most patients who sustain an Achilles tendon rupture report a pop and a feeling of being kicked or shot in the back of the leg. On exam, there is a palpable divot or gap in the area of the rupture along with significant swelling. Patients will demonstrate a positive Thompson test, performed by squeezing the calf muscle while the patient lies prone. This test is positive when the calf is squeezed and plantarflexion does not occur. Diagnostic testing such as an Ultrasound or MRI (magnetic resonance imaging) may be used to determine if there is a complete or partial tear.

Treatment options for an Achilles tendon rupture include surgical repair and conservative non surgical rehabilitation. Decision making is based on age, past medical history, and desired level of functional return. Conservative non-surgical treatment includes rehabilitation with initial immobilization followed by gentle range of motion and progressive strengthening to regain function. Most surgical procedures to repair a torn Achilles tendon include an open longitudinal incision medial to the Achilles tendon (Figure 1).²

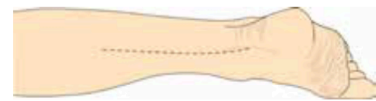


Figure 1 The dotted line represents the longitudinal incision used to expose the ruptured Achilles tendon during surgical repair.

The incision is made medial to the tendon to improve skin healing and to reduce the risk of scarring to the underlying tendon repair. Once the incision is made and the rupture is identified (Figure 2), clamps are used to match the ends together in an optimal tendon length. A primary repair of the two ends of the tendon is performed by stitching them together. There are many different stitching techniques to repair the tendon. The type used will depend on the surgeon, the type of rupture, and tissue quality.

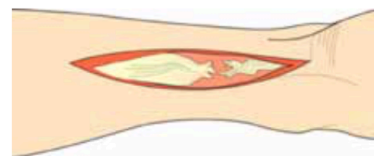


Figure 2 Torn Achilles tendon.

Sometimes the repair is augmented or strengthened using fascia or tendon. A gastrocnemius aponeurosis augmentation is performed when a 1–2 cm wide by 8 cm long flap is made and turned down over the repair and

Rehabilitation After Achilles Tendon Repair

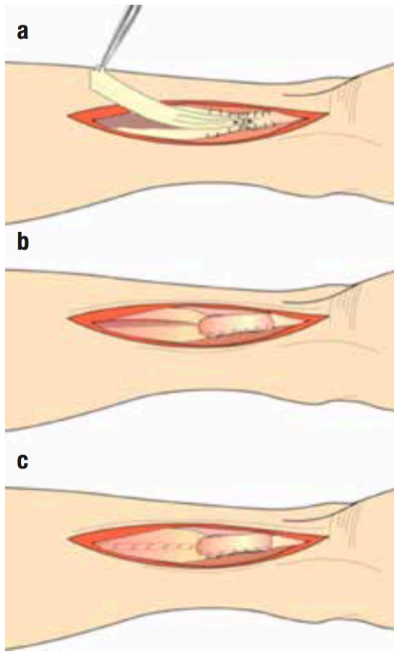


Figure 3 – a: Flap from the gastroc fascia (calf muscle sheath) is surgically freed up above the Achilles tendon repair; **b:** This flap is then “turned down” and sutured over the Achilles tendon repair; **c:** After turn down of the flap the resultant defect in the fascia is sutured together.

sutured to reinforce the repair. The area that the flap was harvested from is then stitched together (Figure 3). In cases of tendon degeneration, or tendinosis, this may help strengthen the repaired tendon.

Historically it has been thought that a surgically repaired Achilles tendon offered a significantly smaller risk of re-rupture rate and increased strength in comparison to non- surgical treatment.⁵ The major risks associated with surgery include infection, deep vein thrombosis (DVT) and difficulty with wound closure. Recent studies suggest similar rupture rates, strength, and mobility between surgery and non surgery approaches to the management of Achilles tendon ruptures.^{3, 4}

The best approach varies for each individual. Your surgeon and you will determine what is best for you by

discussing your specific injury and goals.

Rehabilitation following Achilles tendon repair is vital in regaining motion, strength and function. Initially a walking boot is used for the first 4–5 weeks.

Gradually more weight bearing and mobility is allowed to prevent stiffness post-operatively. The rehabilitation progresses slowly into strengthening, gait and balancing activities. Rehabilitation guidelines are presented in a criterion based progression. General time frames refer to the usual pace of rehabilitation. However, individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehab compliance, tissue quality and injury severity. Specific time frames, restrictions and precautions may also be given to enhance wound healing and to protect the surgical repair/reconstruction.

Rehabilitation After Achilles Tendon Repair

Phase I (Surgery to 2 weeks after surgery)

Precautions	<ul style="list-style-type: none">○ Posterior slab/splint○ Non-weight bearing with crutches
-------------	--

Phase II (2 weeks to 6 weeks following surgery)

Precautions	<ul style="list-style-type: none">○ Weeks 2 – 4<ul style="list-style-type: none">○ Short leg cast○ Protected weight-bearing with crutches○ Weeks 4 – 6<ul style="list-style-type: none">○ Aircast walking boot with 2cm heel lift (wear while sleeping, can remove for bathing/dressing)○ Weight-bearing as tolerated
Therapeutic Exercises	<ul style="list-style-type: none">○ Weeks 4– 6<ul style="list-style-type: none">○ Can Start PT exercises:○ Initiate active plantar flexion and dorsiflexion to neutral○ Initiate active inversion/eversion below neutral○ Hip/knee exercises with no ankle involvement○ Non-weight bearing fitness exercises○ Hydrotherapy – within motion and weight-bearing limitation

Phase III (6 weeks to 12 weeks following surgery)

Precautions	<ul style="list-style-type: none">○ Weeks 6 – 8<ul style="list-style-type: none">○ Remove heel lift○ Continue weight-bearing as tolerated○ Weeks 8 – 12<ul style="list-style-type: none">○ Wean off boot
Therapeutic Exercises	<ul style="list-style-type: none">○ Weeks 6– 8<ul style="list-style-type: none">○ Dorsiflexion stretching○ Graduated resistance exercises (open and closed kinetic chain)○ Proprioceptive and gait training○ Fitness exercises to include WBAT – bicycling, elliptical machine○ Hydrotherapy○ Weeks 8 – 12<ul style="list-style-type: none">○ Continue to progress ROM, strength, and proprioception

Rehabilitation After Achilles Tendon Repair

Phase IV (12 weeks after surgery and beyond)

Goals	<ul style="list-style-type: none">○ Continue to progress ROM, strength, and proprioception
Therapeutic Exercises	<ul style="list-style-type: none">○ Increase dynamic weight-bearing exercises – plyometric training○ Sport-specific training○ Work to restore strength, power, and endurance

References

1. Paul van der Linden et. Al. "Increased Risk of Achilles Tendon Rupture with Quinolone Antibacterial Use" *Arch Intern Med* 2003; 163: 1801-1807.
2. Baer GS, Keene JS. "Tendon Injuries of the Foot and Ankle: Achilles Tendon Ruptures." *In Orthopedic Sports Medicine: Principles and Practice*. (Third Edition) Ed. DeLee and Drez, Saunders, Philadelphia, PA, 2010 2002-2011.
3. Twaddle, Poon. "Early motion for Achilles Tendon Ruptures: Is Surgery Important?" *AJSM* 2007 2033-2038.
4. Nilsson-Helander et al. "Acute Achilles Tendon Rupture: A Randomized, Controlled Study Comparing Surgical and Nonsurgical Treatments Using Validated Outcome Measures" *AJSM* 2010.
5. Bhandari et al. Treatment of acute Achilles tendon ruptures: a systematic overview and metaanalysis *Clin orthop Relate Res* 2002 190-200.
6. Willits, et al. Operative versus nonoperative treatment of acute Achilles tendon ruptures: A multicenter randomized trial using accelerated functional rehabilitation. *JBJS*. 2010;92-A;17(2767-74).

PHYSICAL THERAPY LOCATIONS

*****Please schedule your post-operative physical therapy appointments BEFORE your surgery*****

Manhattan Sports and Manual Physical Therapy

10 East 33rd Street, 2nd Floor
 New York, NY 10016
 (646) 487-2495
www.msmtpt.com

NYU Langone Orthopedic Center PT

333 E 38th St, 5th Floor
 New York, NY 10016
 (646) 501-7077

Other Locations:

BROOKLYN				
R.P.T. Physical Therapy	335 Court Street	Cobble Hill	11231	(718) 855-1543
One on One PT	2133 Ralph Ave	Flatlands	11234	(718) 451-1400
One on One PT	17 Eastern Parkway	Prospect Heights	11238	(718) 623-2500
One on One PT	9920 4th Ave	Bay Ridge	11209	(718) 238-9873
One on One PT	1390 Pennsylvania Ave	Canarsie	11239	(718) 642-1100
One on One PT	1715 Avenue T	Sheepshead Bay	11229	(718) 336-8206

MANHATTAN-DOWNTOWN				
Health SOS	594 Broadway	New York	10012	(212) 343-1500
Occupational & Industrial Orthopaedic Center	63 Downing Street	New York	10014	(212) 255-6690
Promobility	401 Broadway	New York	10013	(646) 666-7122

MANHATTAN -EAST SIDE				
Harkness Center for Dance (PT Service)	614 Second Ave	New York	10003	(212) 598-6054
RUSK at the Men's Center	555 Madison Ave	New York	10022	(646) 754-2000
RUSK Physical Therapy	240 E. 38th Street	New York	10016	(212) 263-6033

STAR Physical Therapy	160 E. 56th Street	New York	10022	(212) 355-7827
Therapeutic Inspirations	144 E. 44th St	New York	10017	(212) 490-3800

MANHATTAN UPPER EAST SIDE

Health SOS	139 E. 57th Street	New York	10022	(212) 753-4767
Premier PT	170 E. 77th Street	New York	10021	(212) 249-5332
Rusk PT at Women 's Health Center	207 E. 84th Street	New York	10028	(646) 754-3300
SPEAR PT	120 E. 56th Street	New York	10022	(212) 759-2211
Sports PT of NY	1400 York Ave	New York	10021	(212) 988-9057

MANHATTAN UPPER WEST SIDE

Premier PT	162 W. 72nd Street	New York	10023	(212) 362-3595
Sports PT of NY	2465 Broadway	New York	10025	(212) 877-2525

MANHATTAN WEST SIDE

Sports Medicine at Chelsea	22 West 21st Street Suite 400	New York	10010	(646) 582-2056
Chelsea Physical Therapy & Rehabilitation	119 W. 23rd Street	New York	10011	(212) 675-3447
SPEAR Physical Therapy	36 W. 44th Street	New York	10036	(212) 759-2280

QUEENS

Ergo Physical Therapy P.C.	107-40 Queens Blvd	Forest Hills	11375	(718) 261-3100
Susan Schiliro, PT (Hand & Upper Extremity only)	99-32 66th Road	Rego Park	11374	(718) 544-1937

STATEN ISLAND

One on One PT	31 New Dorp Lane 1 st , Floor	Staten Island	10306	(718) 979-4466
One on One PT	33 Richmond Hill Rd	Staten Island	10314	(718) 982-6340

LONG ISLAND

Health SOS	375 Deer Park Ave	Babylon	11702	(631) 321-6303
------------	-------------------	---------	-------	----------------

Hand in Hand Rehabilitation (Hand & Upper Extremity only)	346 Westbury Ave	Carle Place	11514	(516) 333-1481
Home PT Solutions	111 W. Old Country Rd.	Hicksville	11801	(516) 433-4570
Bi-County Physical Therapy & Rehabilitation	270-03 Hillside Ave	New Hyde Park	11040	(718) 831 - 1900
Bi-County Physical Therapy & Rehabilitation	397 Willis Ave	Williston Park	11596	(516) 739-5503

WESTCHESTER

Health SOS	1015 Saw Mill River	Ardsley	10502	(914) 478-8780
Premier PT	223 Katonah Ave	Katonah	10536	(914) 232-1480
PRO Sports PT of Westchester	2 Overhill Road	Scarsdale	10583	(914) 723-6987
Westchester Sports Physical Therapy, PC	672 White Plains Road	Scarsdale	10583	(914) 722-2400
Rye Physical Therapy and Rehabilitation	411 Theodore Fremd Ave	Rye	10580	(914) 921-6061
Rye Physical Therapy and Rehabilitation	15 North Broadway; Suite K	White Plains	10601	(914) 686-3132

CONNECTICUT

Premier PT	36 Old Kings Hwy S	Darien	06820	(203) 202-9889
------------	--------------------	--------	-------	----------------

NEW JERSEY

Jersey Central Physical Therapy & Fitness	21 47 Route 27	Edison	08817	(732) 777-9733
Jag PT	34 Mountain Blvd	Warren	07059	(908) 222-0515
Jag PT	622 Eagle Rock Ave	West Orange	07052	(973) 669-0078