

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 Hospital for Joint Diseases
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.

Center for Musculoskeletal Care 333 E. 38th St, New York, NY 10016
Tel: (646) 501-7223/ Fax: (646) 754-9505 / www.NewYorkOrtho.com



- 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 M.D.

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 Tenodeis, 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) 10/325; One tab every 6 hours as needed for adjunctive pain
- Antibiotic – Keflex 500mg; One tab 4 times daily x 4 days
 - Keflex allergy – Clindamycin 300mg; One tab twice daily x 7days.

Knee Ligament Reconstruction

- Pain- Percocet (Oxycodone/Acetaminophen) 10/325; One tab every 6 hours as needed.
- Breakthrough Pain – Dilaudid (Hydromorphone) 2mg; 2-3 tabs every 8 hours as needed for adjunctive pain.
- 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.
- DVT prophylaxis- Aspirin 81mg; 2 tabs daily x 14 days
- ****Antibiotics and Aspirin start post-operative day #1

Non-weight bearing Lower Extremity Surgery (Meniscal Repair, Meniscal Root Repair, 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.
- Adjunctive Pain – Dilaudid (Hydromorphone) 2mg; 2-3 tabs every 8 hours as needed for adjunctive pain.
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.
- DVT prophylaxis- Aspirin 81mg; 2 tabs daily x 14 days
- *****Antibiotics and Aspirin start 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.
- Adjunctive Pain – Dilaudid (Hydromorphone) 2mg; 2-3 tabs every 8 hours as needed for adjunctive pain.

- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.
- DVT Prophylaxis - Aspirin 81mg; 2 tabs daily x 14 days

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.
- Adjunctive Pain – Dilaudid (Hydromorphone) 2mg; 2-3 tabs every 8 hours as needed for adjunctive pain.
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.
- DVT Prophylaxis - Aspirin 81mg; 2 tabs daily x 14 days
- ****Antibiotics and Aspirin start POD #1

Ankle arthroscopy +/- Microfracture and Achilles repair

- 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.
- Adjunctive Pain – Dilaudid (Hydromorphone) 2mg; 2-3 tabs every 8 hours as needed for adjunctive pain.
- Constipation – Docusate (Colace) 100mg; 1 tab twice daily as needed.
- DVT Prophylaxis - Aspirin 81mg; 2 tabs daily x 14 days
- ****Antibiotics and Aspirin start POD #1

Post-Operative Instructions

Knee Arthroscopy

Day of surgery

- A. Diet as tolerated
- B. Icing is important for the first 5-7 days post-op. While the post-op dressing is in place, icing should be done continuously. Once the dressing is removed on the first or second day, ice is applied for 20-minute periods 3-4 times per day. Care must be taken with icing to avoid frostbite. Alternatively, Cryocuff or Game-ready ice cuff can be used as per instructions.
- C. Pain medication as needed every 4-6 hours (refer to pain medication sheet).
- D. Make sure you have a physical therapy post-op appointment scheduled during the first week after surgery.

First Post-Operative Day

- A. Continue ice pack every 1-2 hours while awake
- B. Pain medication as needed.
- C. You may remove surgical bandage and shower this evening. Apply regular bandages to these wounds prior to showering and when showering is complete apply fresh regular bandages. You will need to follow this routine for 2 weeks after surgery.

Second Post-Operative Day Until Return Visit

- A. Continue ice pack as needed.
- B. Unless otherwise noted, you can bear as much weight on the affected leg as you can tolerate. Most patients use crutches or a cane for the first 1-3 days. The amount of pain you experience should be your guide for discontinuing crutch or cane use.
- C. If there is no brace on your leg, you may bend the knee as tolerated.
- D. If you have a brace or a splint on your leg, this must be worn for all walking activities. The brace may be removed for showering. It may also be removed for short periods of time while relaxing (while watching television, reading, etc.) as long as the leg is well supported.
- E. 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 Guidelines for Knee Arthroscopy

Arthroscopy is a common surgical procedure in which a joint is viewed using a small camera. This technique allows the surgeon to have a clear view of the inside of the knee, which helps diagnose and treat knee problems. Recent advances in technology have led to high definition monitors and high resolution cameras. These and other improvements have made arthroscopy a very effective tool for treating knee problems. According to the American Orthopaedic Society for Sports Medicine, more than 4 million knee arthroscopies are performed worldwide each year.⁵ Knee arthroscopy can be used to treat meniscal and articular cartilage tears, fat pad impingement and chronic plica irritation.

There are two types of cartilage in the knee, articular cartilage and meniscus cartilage. Articular cartilage is made up of collagen, proteoglycans and water, which line the end of the bones that meet to form a joint. The primary function of the articular cartilage is to provide a smooth gliding surface for joint motion. Rubbing articular cartilage on articular cartilage is approximately 5 times more smooth (i.e. less friction), than rubbing ice on ice.³ A wide range of injuries can occur to the articular cartilage during sports injuries, trauma and degenerative processes. Smaller, partial thickness tears of the articular cartilage can cause pain, swelling, or catching in the knee. These types of tears can be treated with arthroscopy by removing the torn or frayed articular cartilage with a shaver. The goal of this is to remove the damaged articular cartilage while preserving the remaining intact articular cartilage.

The meniscus cartilage in the knee includes a medial (inside part of the knee) meniscus and a lateral (outside part of the knee) meniscus (Figures 1 and 2). Together they are referred to as menisci. The menisci are wedge shaped and are thinner toward the center of the knee and thicker toward the periphery of the knee joint (Figures 1 and 3). This shape is very important to its function since the primary function of the menisci is to improve load transmission. A relatively round femur sitting on a relatively flat tibia forms the knee joint. Without the menisci the area of contact force between these two bones would be relatively small, increasing the contact stress by 235-335% (Figure 4). The menisci also provide some shock absorption, lubrication and joint stability.

There are two categories of meniscal tears, acute traumatic tears and degenerative tears. Degenerative tears occur most commonly in middle-aged people as a result of repetitive stresses to the menisci over time, which severely weaken the tissue and cause a nonacute, degenerative tear. This process of tissue degeneration makes it very unlikely that a surgical repair will heal or that the surrounding meniscus will be strong enough to hold the sutures use to repair it.

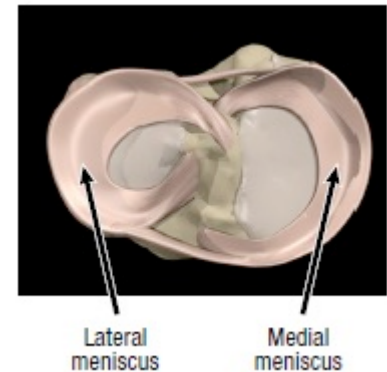


Figure 1 Lateral and medial meniscus of the left knee (shown here from above the knee, without the femur)

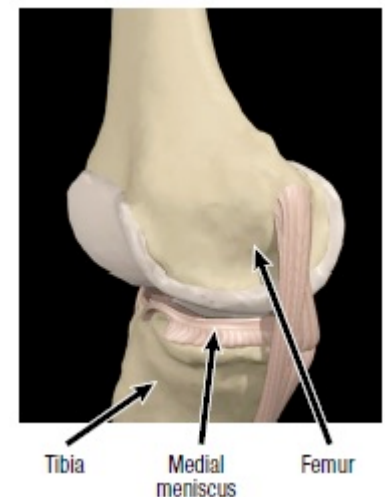


Figure 2 Medial (inside) view of the knee

Rehabilitation Protocol After Knee Arthroscopy

One report showed that less than 10% of meniscal tears occurring in patients more than forty years of age were repairable. Symptoms of a degenerative meniscus may include swelling, pain along the joint line, catching, and locking. If a degenerative tear is symptomatic it is usually surgically removed. This is called a partial meniscectomy, which is termed partial because the surgeons only remove the segment of meniscus containing the tear as opposed to removing the entire meniscus.

Acute traumatic tears occur most frequently in the athletic population as a result of a twisting injury to the knee when the foot is planted. Symptoms of an acute meniscus tear include swelling, pain along the joint line, catching, locking and a specific injury. Often times these tears can be diagnosed by the history of the problem and a good physical examination. Sometimes an MRI will be used to assist in making the diagnosis. The arrow in Figure 3 shows a normal meniscus on an MRI, but the arrows in Figure 5 show a torn meniscus.

If an athlete suffers a meniscal tear the three options for treatment include: non-operative rehabilitation; surgery to trim out the area of torn meniscus; or surgery to repair (stitch together) the torn meniscus. The treatment chosen will depend on the location of the tear; the size of the tear; the sport to which the athlete is returning; ligamentous stability of the knee; and any associated injury.² The location of the tear is important because the outer portion of the meniscus has a good blood supply whereas the inner portion has a very poor blood supply. Blood vessels (the perimeniscular capillary plexus) enter the peripheral one third of the meniscus,¹ this blood supply is necessary for a tear or surgical repair to heal (Figure 6). Without an adequate blood supply, usually the area of torn meniscus has to be removed.

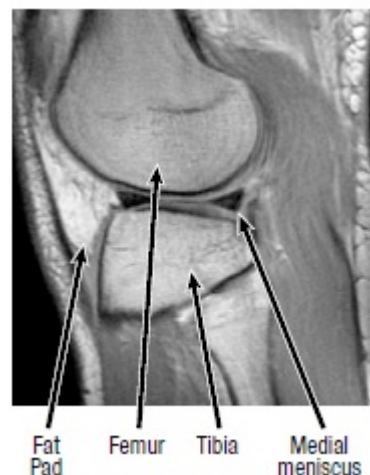


Figure 3 Normal MRI (sagittal view) of the knee, lateral side (outside)



Figure 5 MRI (sagittal view) of a lateral meniscus tear (yellow arrows)

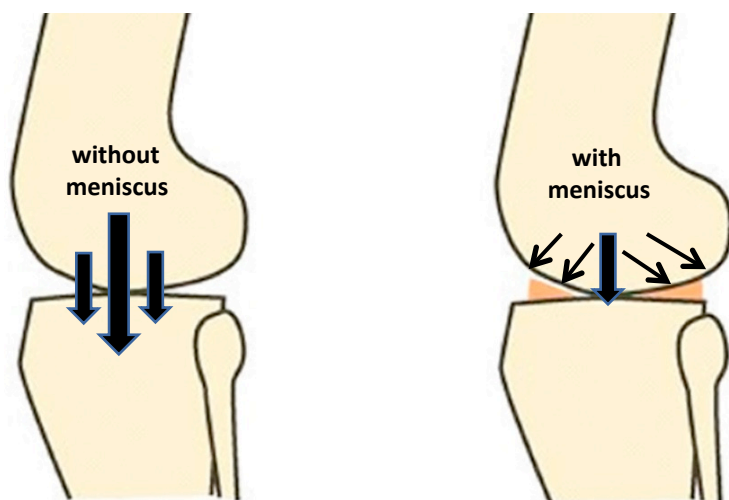


Figure 4 Schematic representation of the meniscal effect on contact pressure in the knee. Contact area is increased by 50% with addition of menisci. This reduces contact pressures.

Rehabilitation Protocol After Knee Arthroscopy

Other structures in the knee that can cause pain and limit function when injured or chronically inflamed are the fat pad (Figure 3) and the plica. These problems can arise from a variety of causes, but if they do not improve with non-surgical measures it may be necessary to use knee arthroscopy to remove the tissue. Secondary problems may also arise from injury, such as scar tissue or cysts, which need to be removed. After knee arthroscopy, rehabilitation with a physical therapist or athletic trainer is usually required to optimize the outcome. Rehabilitation will focus on restoring range of motion, developing strength and movement control, and guiding the athlete's return to sport. The rehabilitation guidelines are presented in a criterion based progression. Specific time frames, restrictions and precautions are given to protect healing tissues and the surgical repair/reconstruction. General time frames are also given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehabilitation compliance and injury severity. The size and location of the meniscal tear also may affect the rate of post-operative progression.

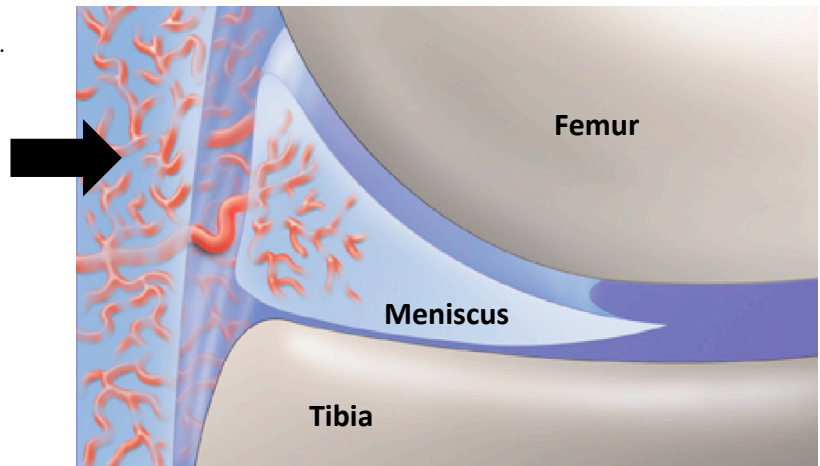


Figure 6 Perimeniscular capillary plexus (thick arrow) providing blood supply to the outer third of the meniscus

References

1. Arnoczky SP and Warren RF. Microvasculature of the human meniscus. *Am J Sport Med*, 1982
2. Fowler PJ and Pompan D. Rehabilitation after mensical repair. *Tech in Ortho*, 8(2): 137-139, 1993.
3. Ulrich GS and Aronczyk SP. The basic science of meniscus repair. *Tech in Ortho*, 8(2): 56-62, 1993.
4. Zacharias J. Mensical Injuries: Anatomy, Diagnosis and Treatment. *UW Sports Medicine conference*. September 8, 1999.
5. American Academy of Orthopedic Surgeons: orthoinfo.aaos.org

Rehabilitation Protocol: Knee Arthroscopy

Name: _____

Date: _____

Diagnosis: _____

Date of Surgery: _____

☐ **Phase I (Weeks 0-2)**

- **Weightbearing:** As tolerated with crutches (for balance) x 24-48 hours – progress to WBAT
- **Range of Motion** – AAROM → AROM as tolerated
 - Goal: Immediate full range of motion
- **Therapeutic Exercises**
 - Quad and Hamstring sets
 - Heel slides
 - Co-contractions
 - Isometric adduction and abduction exercises
 - Straight-leg raises
 - Patellar mobilization

☐ **Phase II (Weeks 2-4)**

- **Weightbearing:** As tolerated
- **Range of Motion** – maintain full ROM – gentle passive stretching at end ranges
- **Therapeutic Exercises**
 - Quadriceps and Hamstring strengthening
 - Lunges
 - Wall-sits
 - Balance exercises – Core work

☐ **Phase III (Weeks 4-6)**

- **Weightbearing:** Full weightbearing
- **Range of Motion** – Full/Painless ROM
- **Therapeutic Exercises**
 - Leg press
 - Hamstring curls
 - Squats
 - Plyometric exercises
 - Endurance work
 - Return to athletic activity as tolerated

Comments:

Frequency: _____ times per week

Duration: _____ weeks

Signature: _____

Date: _____

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.msmt.com

Center for Musculoskeletal Care 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
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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
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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
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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