Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

About Your Kyphoplasty

This information will help you get ready for your kyphoplasty (KY-foh-PLAS-tee) procedure at MSK.

What is kyphoplasty?

Kyphoplasty is a procedure done to stabilize (strengthen) a weak or fractured (broken or cracked) vertebra. A vertebra is a bone in your back.

An interventional neuroradiologist (NOOR-oh-RAY-dee-AH-loh-jist) will do your kyphoplasty procedure. An interventional neuroradiologist is a doctor with special training in image-guided procedures.

During your kyphoplasty, your care team will give you anesthesia through an intravenous (IV) catheter. Anesthesia is medication to make you fall asleep during your procedure.

Your doctor will use fluoroscopy (real-time X-rays) to place 2 needles through your skin and back muscles. They will put the needles into your vertebra and use them to inflate (fill) a balloon-like device. Inflating the device will create space inside your bone. The device has contrast, a special dye that helps your healthcare provider see the balloon in the X-rays.

Then, they will put an injection (shot) of bone cement into your weak or fractured bone. This will help make it stronger to prevent it from fracturing again. They will do this for every vertebra that needs to be strengthened.

Kyphoplasty often is done as an outpatient procedure, not in the hospital. Most people are able to go home the same day. Talk with your care team about what to expect.

What to do before your kyphoplasty

Ask about your medicines

You may need to stop taking some of your usual medicines before your procedure. Talk with your healthcare provider about which medicines are safe for you to stop taking.

We've included some examples of medicines below, but there are many others. **Make sure your care team knows all the prescription and over-the-counter medicines you take.** A prescription medicine is one you can only get with a prescription from a healthcare provider. An over-the-counter medicine is one you can buy without a prescription.

It's very important to take your medicines the right way in the days before your procedure. If you don't, we may need to reschedule your procedure.

Anticoagulants (blood thinners)

A blood thinner is a medicine that changes how your blood clots. Blood thinners are often prescribed to help prevent a heart attack, stroke, or other problems caused by blood clots.

If you take a blood thinner, ask your healthcare provider what to do before your procedure. They may tell you to stop taking it a certain number of days before your procedure. This will depend on the type of procedure you're having and the reason you're taking a blood thinner.

Here are some examples of blood thinners. There are others, so be sure your care team knows all the medicines you take. **Do not stop taking your blood thinner without talking with a member of your care team.**

• Apixaban (Eliquis®) • Aspirin • Celecoxib (Celebrex®) • Cilostazol (Pletal®) • Clopidogrel (Plavix®) • Dabigatran (Pradaxa®) • Dalteparin (Fragmin®) • Dipyridamole (Persantine®) • Edoxaban (Savaysa®) • Enoxaparin (Lovenox®) • Fondaparinux (Arixtra®) • Heparin injection (shot)	• Meloxicam (Mobic®) • Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (Advil®, Motrin®) and naproxen (Aleve®) • Pentoxifylline (Trental®) • Prasugrel (Effient®) • Rivaroxaban (Xarelto®) • Sulfasalazine (Azulfidine®, Sulfazine®) • Ticagrelor (Brilinta®) • Tinzaparin (Innohep®) • Warfarin (Jantoven®, Coumadin®)

Other medicines and supplements can change how your blood clots. Examples include vitamin E, fish oil, and nonsteroidal anti-inflammatory drugs (NSAIDs). Read *How To Check if a Medicine or Supplement Has Aspirin, Other NSAIDs, Vitamin E, or Fish Oil* (www.mskcc.org/pe/check-med-supplement). It will help you know which medicines and supplements you may need to avoid before your procedure.

Diabetes medicines

If you take insulin or other diabetes medicines, talk with your MSK healthcare provider and the healthcare provider who prescribes it. Ask them what to do before your surgery or procedure. You may need to stop taking it or take a different dose (amount) than usual. You may also need to follow different eating and drinking instructions before your surgery or procedure. Follow your healthcare provider's instructions.

Your care team will check your blood sugar levels during your surgery or procedure.

GLP-1 medicines for weight loss

It's important to tell your healthcare provider if you take a GLP-1 medicine for weight loss. You will need to follow special eating and drinking instructions before your surgery or procedure. **It is very important to follow these**

instructions. If you do not follow them, your surgery or procedure may be delayed or canceled.

- **Follow a clear liquid diet the day before your surgery or procedure.** Do not eat any solid food. Read *Clear Liquid Diet* (www.mskcc.org/pe/clear-liquid-diet) to learn more.
- **Stop drinking 8 hours before your arrival time.** Do not eat or drink anything after this time, including clear liquids. You can have small sips of water with your medicines.

To learn more, read *Eating and Drinking Before Your Surgery or Procedure When Taking GLP-1 Medicines* (www.mskcc.org/pe/eat-drink-glp1).

Here are some examples of GLP-1 medicines. There are others, so be sure your care team knows all the medicines you take. Some of these are meant to be used to help manage diabetes but are sometimes prescribed just for weight loss.

• Semaglutide (Wegovy®, Ozempic®, Rybelsus®) • Dulaglutide (Trulicity®)	• Tirzepatide (Zepbound®, Mounjaro®) • Liraglutide (Saxenda®, Victoza®)

Diuretics (water pills)

A diuretic is a medicine that helps control fluid buildup in your body. Diuretics are often prescribed to help treat hypertension (high blood pressure) or edema (swelling). They can also be prescribed to help treat certain heart or kidney problems.

If you take a diuretic, ask the healthcare provider doing your procedure what to do before your procedure. You may need to stop taking it the day of your procedure.

We’ve listed some examples of common diuretics below. There are others, so be sure your care team knows all the medicines you take.

• Bumetanide (Bumex®) • Furosemide (Lasix®)	• Hydrochlorothiazide (Microzide®) • Spironolactone (Aldactone®)

Take devices off your skin

You may wear certain devices on your skin. Before your procedure, surgery, or scan, some device makers recommend you take off your:

- Continuous glucose monitor (CGM)
- Insulin pump

Talk with your healthcare provider about scheduling your appointment closer to the date you need to change your device. Make sure to bring an extra device with you to put on after your procedure, surgery, or scan.

You may not be sure how to manage your glucose (blood sugar) while your device is off. If so, before your appointment, talk with the healthcare provider who manages your diabetes care.

Arrange for someone to take you home

You must have a responsible care partner take you home after your procedure. A responsible care partner is someone who can help you get home safely. They should be able to contact your care team if they have any concerns. Make sure to plan this before the day of your procedure.

If you don't have a responsible care partner to take you home, call one of the agencies below. They'll send someone to go home with you. There's a charge for this service, and you'll need to provide transportation. It's OK to use a taxi or car service, but you still need a responsible care partner with you.

Agencies in New York

VNS Health: 888-735-8913

Caring People: 877-227-4649

Agencies in New Jersey

Caring People: 877-227-4649

Tell us if you're sick

If you get sick (including having a fever, cold, sore throat, or flu) before your procedure, call your IR doctor. You can reach them Monday through Friday from 9 a.m. to 5 p.m.

After 5 p.m., during the weekend, and on holidays, call 212-639-2000. Ask for the Interventional Radiology fellow on call.

Note the time of your appointment

A staff member will call you 2 business days before your procedure. If your procedure is scheduled for a Monday, they'll call you on the Thursday before. They'll tell you what time to get to the hospital for your procedure. They will also remind you where to go.

If you don't get a call by noon (12 p.m.) on the business day before your procedure, call 646-677-7001. If you need to cancel your procedure for any reason, call the healthcare provider who scheduled it for you.

Take care of your spine

It's important to take care of your spine before your procedure. Follow these guidelines on the days leading up to your procedure:

- Do not bend over or twist from your waist.
- Do not bend over deeply, such as to tie your shoelace.
- Do not lift any objects heavier than 5 pounds (2.3 kilograms).
- It's safe to walk but avoid using a treadmill.

Avoid these activities until your healthcare provider says it's safe to continue them as you normally would.

What to do the day before your procedure

Instructions for eating

Important: If you take a GLP-1 medicine for weight loss, do not follow these instructions. Follow the instructions in *Eating and Drinking Before Your Surgery or Procedure When Taking GLP-1 Medicines* (www.mskcc.org/pe/eat-drink-glp1) instead.

Stop eating at midnight (12 a.m.) the night before your surgery or procedure. This includes hard candy and gum.

Your healthcare provider may have given you different instructions for when to stop eating. If so, follow their instructions. Some people need to fast (not eat) for longer before their surgery or procedure.

What to do the day of your procedure

Instructions for drinking

Important: If you take a GLP-1 medicine for weight loss, do not follow these instructions. Follow the instructions in *Eating and Drinking Before Your Surgery or Procedure When Taking GLP-1 Medicines* (www.mskcc.org/pe/eat-drink-glp1) instead.

Between midnight (12 a.m.) and 2 hours before your arrival time, only drink the liquids on the list below. Do not eat or drink anything else. Stop drinking 2 hours before your arrival time.

- Water.
- Clear apple juice, clear grape juice, or clear cranberry juice.
- Gatorade or Powerade.
- Black coffee or plain tea. It's OK to add sugar. Do not add anything else.

- Do not add any amount of any type of milk or creamer. This includes plant-based milks and creamers.
- Do not add flavored syrup.

If you have diabetes, pay attention to the amount of sugar in your drinks. It will be easier to control your blood sugar levels if you include sugar-free, low-sugar, or no added sugar versions of these drinks.

It's helpful to stay hydrated before surgeries and procedures, so drink if you are thirsty. Do not drink more than you need. You will get intravenous (IV) fluids during your surgery or procedure.

Stop drinking 2 hours before your arrival time. This includes water.

Your healthcare provider may have given you different instructions for when to stop drinking. If so, follow their instructions.

Things to remember

- Take only the medications your doctor told you to take the morning of your procedure. Take them with a few sips of water.
- If you're taking pain medication, take it before your procedure with a few sips of water.
- Do not use any cream, petroleum jelly (Vaseline®), powder, makeup, perfume, or cologne. You can use deodorant and light moisturizers.
- Do not wear any metal objects. Remove all jewelry, including body piercings.
- Leave valuables (such as credit cards or jewelry) at home.
- If you wear contact lenses, wear your glasses instead.

What to bring

- A list of the medications you take at home, including patches and creams.
- Medications for breathing problems (such as inhalers), medications for chest pain, or both.
- Your pain medication.
- A case for your glasses or contacts.
- Your Health Care Proxy form and other advance directives, if you filled them out.
- Your breathing device for sleep apnea (such as your BiPAP CPAP machine), if you have one. If you can't bring your machine, we will give you one to use while you're in the hospital.

Where to go

Your procedure will take place at:

Memorial Hospital (MSK's main hospital)
1275 York Avenue (between East 67th and East 68th streets)
New York, NY 10065

Take the M elevator to the 2nd Floor. Enter through the glass doors.

What to expect when you arrive

Many staff members will ask you to say and spell your name and birth date. This is for your safety. People with the same or similar names may be having a procedure on the same day.

After changing into a hospital gown, you'll meet your nurse. They will place an IV catheter into one of your veins, usually in your hand or arm. The IV will be used to give you anesthesia during your procedure.

If you have an implanted port (such as a mediport), your doctor may give you anesthesia through your port. Then, they will change to a peripheral IV catheter (PIV) in your arm once your procedure starts.

Before your procedure, your doctor will talk with you, explain the procedure, and answer your questions.

Meet with a nurse

You'll meet with a nurse before your procedure. Tell them the dose of any medicines you took after midnight (12 a.m.) and the time you took them. Make sure to include prescription and over-the-counter medicine, patches, and creams.

Your nurse may place an intravenous (IV) line in one of your veins, usually in your arm or hand. If your nurse does not place the IV, your anesthesiologist will do it in the procedure room.

Meet with an anesthesiologist

You will also meet with an anesthesiologist (A-nes-THEE-zee-AH-loh-jist). An anesthesiologist is a doctor with special training in anesthesia. They will give you anesthesia during your procedure. They will also:

- Review your medical history with you.
- Ask if you've had any problems with anesthesia in the past. This includes nausea (feeling like you're going to throw up) or pain.

- Talk with you about your comfort and safety during your procedure.
- Talk with you about the kind of anesthesia you'll get.
- Answer questions you have about anesthesia.

Going into the procedure room

When it's time for your procedure, a member of your care team will bring you into the procedure room. They will attach you to equipment to monitor your heart, breathing, and blood pressure. They will also give you oxygen through a mask.

They'll give you anesthesia through your IV. Once you're asleep, your care team will position you on your stomach. They will clean your back and cover it with sterile drapes.

They will inject local anesthesia into the area where your doctor will be working. Local anesthesia is medication to make an area numb during your procedure.

Your doctor will use fluoroscopy to take images of the area. This will help them place the needles in the right place. Then, they will do the procedure.

What to do after your kyphoplasty

In the recovery room

A staff member will bring you to the recovery room after your procedure. Your care team will use surgical glue called Dermabond® to close your injection site(s). Your nurse will monitor your injection site(s) for any bleeding. Most people are in the recovery room for at least 2 hours.

Tell your nurse if you have:

- Increasing pain or discomfort
- Shortness of breath or trouble breathing
- Any symptoms that concern you

Caring for yourself at home

- Let soapy water rinse over the injection site(s). Then, pat the area dry. Do not try to remove the glue. It will fall off on its own in 1 to 2 weeks.
- Don't take a bath, swim, or sit in a hot tub for 7 to 10 days after your procedure. It is OK to take a shower or sponge bath during this time.
- You may put a clean bandage over the injection site(s) until they are healed.
- It's important to take care of your spine after your procedure. Follow these guidelines for 4 to 6 weeks after your procedure:
  - Do not bend over or twist from your waist.
  - Do not bend over deeply, such as to tie your shoelace.
  - Do not lift any objects heavier than 5 pounds (2.3 kilograms).

When to call your healthcare provider

Call the IR clinic at 212-609-2209, or your healthcare provider,if you have:

- A fever of 101 °F (38.3 °C) or higher.
- Pain that is uncontrolled or worse than it was before your procedure.
- New pain.
- Redness, swelling, or drainage around the needle marks on your back.
- Any symptoms that concern you.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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