

Stroke Prevention Clinic

Your Guide to Stroke and TIA

Contact information

Telephone: 905-521-2100

Booking Clerk: extension 44713

Stroke Clinic Nurse: extension 46814

You were seen in the Stroke Prevention Clinic because you may have had a stroke or transient ischemic attack (TIA), also called a mini-stroke. This can be a stressful time for you and you may have questions about your care. This handout will help to answer some of those questions.

For more information on stroke and TIA visit the Central South Stroke Network website at www.csnstroke.ca

Table of contents

	Page
What is a stroke?	3
Types of stroke	3
Learn the signs of stroke	4
Risk factors for TIA and stroke	5
Medications	8
Make healthy food choices	9
Fatigue after stroke	12
Depression	13
Sex and intimacy	14
Return to work	14
Prevent a fall	15
Tests that may be ordered at your Stroke Prevention Clinic appointment	18

What is a stroke?

A stroke happens when blood stops flowing to any part of your brain, damaging brain cells. It is caused by a blockage of blood flow to the brain or the rupture of blood vessels in the brain. The effects of a stroke depend on the part of the brain that was damaged and the amount of damage done.

Types of stroke

Ischemic stroke

This type of stroke is caused by a blockage or clot in a blood vessel in your brain. The blockage can be caused when a substance called plaque builds up on the inside wall of an artery. The blockage or clot grows as blood cells and fat cells stick to the plaque. Gradually, it grows big enough to block normal blood flow. The blockage or clot can form in an artery in your brain. Or, it can form in an artery in another part of your body and travel to the brain.

Hemorrhagic stroke

This type of stroke is caused when an artery in the brain breaks open. The interrupted blood flow causes damage to your brain.

Transient Ischemic Attack (TIA)

A transient ischemic attack (TIA) is caused by a small clot that briefly blocks an artery. TIA and minor ischemic stroke fall along a continuum. TIA symptoms disappear completely within 24 hours (usually within one hour). If any symptoms still exist after 24 hours, then it would be considered a stroke, not a TIA. A TIA can be a warning of a future stroke. They are a medical emergency. Call 9-1-1 or your local emergency number immediately. Do not wait

Above definitions reproduced with the permission of the Heart and Stroke Foundation of Canada, 2023. www.heartandstroke.ca

Learn the signs of stroke

Know the signs of **STROKE**

F**Face**

is it drooping?

A**Arms**

can you raise both?

S**Speech**

is it slurred or jumbled?

T**Time**

to call 9-1-1

Beat stroke**Call 9-1-1 FAST**heartandstroke.ca/FAST© Heart and Stroke Foundation of Canada, 2023 | * The heart and / icon on its own and the heart and / icon followed by another icon or words are trademarks of the Heart and Stroke Foundation of Canada.

**If you have one or more of these
signs, call 9-1-1.**

Risk factors for stroke and TIA

Some risk factors are under your control. Check the ones that apply to you.

Risk factor	What you can do...
<input type="checkbox"/> High blood pressure	<p>✓ Keep your blood pressure in check. High blood pressure is the leading cause of stroke.</p> <p>✓ Check your blood pressure regularly. Your blood pressure should be less than 140/90, or less than 130/80 if you have diabetes. If your blood pressure is consistently above these numbers, follow up with your family doctor.</p> <p>When to check your blood pressure:</p> <ul style="list-style-type: none"> • Before taking your blood pressure medication • At least two hours after a meal • After emptying bladder and bowel • One hour after drinking coffee or smoking • Thirty minutes after exercise • Always after resting five minutes, without talking <p>How to measure your blood pressure:</p> <ul style="list-style-type: none"> • In a comfortable, distraction-free environment • Without talking or moving • In the sitting position with back supported • With your legs uncrossed and feet flat on the floor • Ensuring your arm is bare • Using your non-dominant arm, unless told otherwise, with the lower edge of the cuff 3 cm above your elbow • With your arm supported and the middle of the cuff at heart level (i.e. resting on the table in front of you)

<input type="checkbox"/> Tobacco use	<ul style="list-style-type: none">✓ Quit tobacco products. This will help to reduce plaque build-up in your arteries and will also help to prevent blood from clotting or sticking to the plaque. You are more likely to be successful in quitting smoking if you plan ahead and have support:<ul style="list-style-type: none">• Get help and counselling from your health care provider.• Make your home and car smoke-free.• Use quit smoking medications like the nicotine patches to manage your cravings and withdrawal symptoms.• Contact the Stroke Clinic Nurse for an up to date list of community resources to help you quit smoking.
<input type="checkbox"/> Excessive alcohol	<ul style="list-style-type: none">✓ Reduce alcohol intake. If you do not drink, do not start.✓ Do not exceed two standard drinks per week.✓ A standard drink means:<ul style="list-style-type: none">• Beer: 341 ml (12 oz) of beer, 5 % alcohol• Cooler, cider, ready-to-drink: 341 ml (12 oz) of drinks, 5% alcohol• Wine: 142 ml (5 oz) of wine, 12% alcohol• Spirits (whisky, vodka, gin, etc.): 43 ml (1.5 oz) of spirits, 40% alcohol

Risk factor	What you can do...
<input type="checkbox"/> High cholesterol	<ul style="list-style-type: none"> ✓ Aim for an LDL cholesterol level less than 1.8.
<input type="checkbox"/> Diabetes	<ul style="list-style-type: none"> ✓ Keep your blood sugars within the normal range. ✓ If you have diabetes, see your family doctor every 3 months to have your bloodwork checked. ✓ Aim for a 3 month average blood sugar, also called Hemoglobin A1C of less than 7%.
<input type="checkbox"/> Food choices	<ul style="list-style-type: none"> ✓ Healthy food choices can improve your blood pressure, blood sugar, cholesterol and weight, reducing your risk for stroke. See pages 9 to 10 for more information.
<input type="checkbox"/> Exercise	<ul style="list-style-type: none"> ✓ Include at least 30 minutes of exercise most days of the week. ✓ Regular exercise can lower blood pressure and cholesterol, and improve your blood sugars.
<input type="checkbox"/> Stress	<ul style="list-style-type: none"> ✓ Identify your stressors, be active, make time for yourself, and laugh often. ✓ Try to find a balance in your work, personal time and activities. ✓ Find someone you can talk to. This is an important way to reduce stress.
<input type="checkbox"/> Atrial fibrillation	<ul style="list-style-type: none"> ✓ Atrial fibrillation is a type of irregular heart beat that can cause blood clots to form in the heart. These clots can travel to the brain and cause a stroke. ✓ If you have atrial fibrillation, you may be started on a medication to prevent blood clots from forming in the heart. This medication is called an anticoagulant. ✓ It is important that you take this medication as directed by your health care provider.

Medications

When you have had a stroke or a TIA, medications will help you recover and prevent another stroke.

Medications have positive effects and possible side effects. If you have side effects, they usually happen when you begin treatment or when a dose is increased. Most side effects will go away once your body gets used to the medication. Talk to your doctor or pharmacist about how to manage side effects before you decrease or stop taking prescribed medications.



Tips

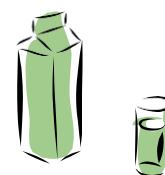
- Keep an updated list of your medications with you. Know the names of your medications, the dosage and when you take them.
- Take your medication according to the directions on the label and as prescribed by the physician.
- Take your medication at the same time each day, such as with breakfast or at bedtime as prescribed.
- Do not stop taking medication without checking with your doctor.
- If you forget to take your medication, do not double the dose. Call your pharmacist for directions on what to do.
- If you take medication to lower your blood pressure, sit at the side of the bed and dangle your legs before getting up to avoid feeling dizzy.
- Taking “over-the-counter” medications can interact with your prescribed medication. Check with your doctor and pharmacist before taking vitamins, supplements, herbal medicine, cough and cold medications, pain relievers and all other over-the-counter medications.
- Pill organizers such as pill boxes, dosettes, and blister packs, can be useful.
- Do not share your medications with anyone else and do not take anyone else’s medications.
- Use the same pharmacy for all of your medications.
- If you are taking at least 3 prescribed medications for a chronic condition, you are eligible for the MedsCheck Program. Call your pharmacist to book an appointment.



Make healthy food choices

Eat a variety of natural, whole, and minimally processed foods at each meal.

- Eat mostly plant-based foods **daily**. These include:
 - fresh, frozen or canned vegetables without additives
 - fresh or frozen unsweetened fruit, or fruit canned in water without added sugars
 - legumes such as kidney beans, black beans, chickpeas, lentils and soybeans
- * If using canned legumes or vegetables, choose cans with no added salt, or rinse the legumes well to remove excess salt.
- unsalted nuts and seeds, or their natural butters (without other added ingredients)
- whole grains such as whole grain bread, brown rice or pasta, oats, quinoa, barley, bulgur and wheat berries
- healthy oils such as olive oil or canola oil
- Eat fish a few times a week.
- Choose skinless white meat such as chicken or turkey. Limit red meat.
- Avoid processed or cured meats such as deli meats, sausage, and bacon.
- Include lower-fat dairy products such as milk, milk alternatives (like fortified soy beverage) or yogurt daily.
- Drink water when thirsty. Avoid soft drinks, energy drinks, fruit drinks, and juice.

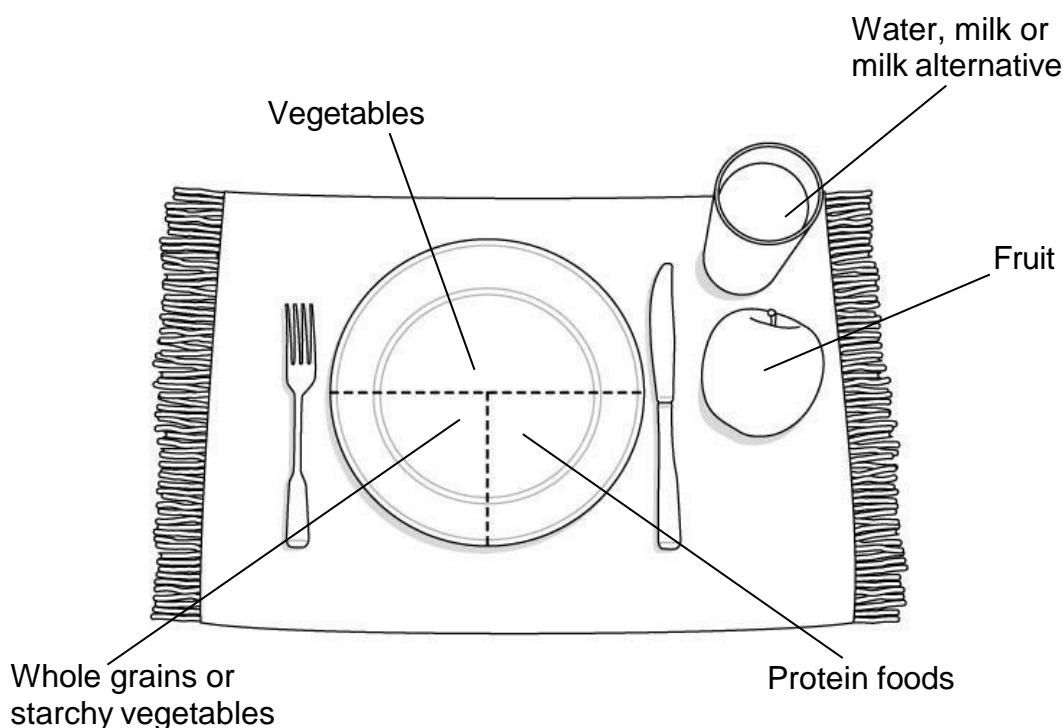


What do healthy servings look like?

- Fill $\frac{1}{2}$ of your plate with vegetables (such as broccoli, asparagus, green beans, carrots, tomatoes, beets, lettuce or other green leafy vegetables).
- Aim to have at least two different colours of vegetables on your plate.
- Fill $\frac{1}{4}$ of your plate with whole grains or starchy vegetables such as potatoes (white or sweet) or corn.
- Fill the other $\frac{1}{4}$ of your plate with protein foods such as fish, lean meats, eggs, and plant-based protein choices like legumes (such as kidney beans, black beans, chickpeas or lentils) or tofu.
- Have a glass of water, milk or milk alternative (such as fortified soy beverage) and a piece of fruit to complete your meals.



Use this picture as a guideline to help you keep healthy servings on your plate.



Fibre

Did you know most Canadians get $\frac{1}{2}$ of the fibre they need every day? In general, adults should get 21 to 38 grams each day.

Fibre is only found in plant foods.

To increase your fibre intake, include whole grains, fruits and vegetables, oats, oat bran, ground or crushed flax seed, psyllium, barley and dried or canned legumes such as kidney beans, black beans, chickpeas or lentils.



When increasing your fibre intake, make sure to do so **gradually** and increase your water intake at the same time.

Salt

Limit your intake of salt (sodium).

Most of the sodium in our diet comes from processed foods and restaurant or take-out meals. Adults should have less than 2300 milligrams (mg) of sodium each day, which is equal to a teaspoon of salt from all sources



Nutrition Facts Table

It is important to read the Nutrition Facts Table labels to find out the sodium content of foods.

1. Look at the serving size at the top. Compare this amount to the amount that you eat.
2. Look at the milligrams of sodium. Choose foods with less sodium.

Vegetable Soup #1

Nutrition Facts	
Per 250 mL (1 cup)	
Amount	% Daily Value
Calories 110	
Fat 1 g	2%
Saturated 0.5 g	
+ Trans 0 g	3%
Cholesterol 10 mg	
Sodium 770 mg	29%
Carbohydrate 22 g	7%
Fibre 4 g	16%
Sugars 6 g	
Protein 3 g	

Vegetable Soup #2

Nutrition Facts	
Per 250 mL (1 cup)	
Amount	% Daily Value
Calories 120	
Fat 1.0 g	1%
Saturated 0.5 g	
+ Trans 0 g	3%
Cholesterol 0 mg	
Sodium 410 mg	17%
Carbohydrate 24 g	8%
Fibre 4 g	16%
Sugars 8 g	
Protein 3 g	

Vegetable Soup #3

Nutrition Facts	
Per 250 mL (1 cup)	
Amount	% Daily Value
Calories 110	
Fat 2.5 g	4%
Saturated 0 g	
+ Trans 0 g	0%
Cholesterol 0 mg	
Sodium 75 mg	3%
Carbohydrate 17 g	5%
Fibre 3 g	12%
Sugars 4 g	
Protein 3 g	

Soup #3 has the least amount of sodium (milligram or mg) for each 1 cup (250 ml) serving.

The best thing you can do is to eat unprocessed and homemade foods more often. That way you control the sodium!

Use herbs, spices and lemon juice instead of salt-containing seasonings to flavour food.



Ask your family physician for a referral to a Registered Dietitian for additional support if needed.

Fatigue after stroke

Fatigue or feeling tired is one of the most common effects of a stroke and can range from mild to severe. It has been described as the most difficult or upsetting problem that people deal with after stroke. You are more likely to experience fatigue after a stroke than a TIA.

Tips to help manage fatigue:

- Give yourself plenty of time to complete activities or tasks; the more you push yourself the worse you are likely to feel.
 - Do not try to do all of the things that you used to do and at the same speed. Pace yourself – start off doing less for a while so that you may slowly and steadily attempt to build stamina.
 - Plan rest periods in your daily routine. Even tasks that do not require much energy can make you feel tired such as riding in a car or eating a meal.
 - Try not to push yourself if you are having a better day. You may feel exhausted the next day or longer. Simplify tasks by organizing your environment.
 - Listen to your body; rest during the day if you need to.
 - Engage in planned exercise. Go for a short walk or use a stationary bike for a few minutes. Being active may help improve fatigue.
 - Make healthy food choices (see pages 9 to 11).
 - If you are able to return to work after stroke, it may be helpful to start with less hours at first. Slowly build up to your regular work schedule as tolerated.
 - Prioritize activities that are meaningful to you and your well-being.
-

Depression

Depression is a normal reaction to a major life change. Here are some key points about depression:



- Up to half of all people who have had a stroke will have some degree of depression.
- Changes in the brain from the stroke can cause depression.
- Sometimes depression happens right after a stroke or not until weeks or months later.
- Symptoms of depression can vary from mild to severe.

Symptoms of depression include:

- Appetite and weight changes
- Memory and concentration problems
- Lack of interest in activities of daily living (such as caring for yourself or household chores)
- Lack of interest in preferred activities (such as spending time with friends, watching favourite TV shows, or doing hobbies)
- Headaches, chronic pain, digestive problems
- Feeling worthless
- Feeling sad, anxious, guilty, irritable or hopeless
- Withdrawing from others
- Trouble sleeping
- Always feeling tired

Treatment for depression includes medication and counselling:

- In most cases, medication does work and can take up to 6 weeks before you notice a change.
- Continue to communicate with your care provider (family doctor, social worker or counsellor).
- Having proper rest and meals will aid in having the energy you need for your recovery.
- Explore local support groups and services. For more information on support and services in your area visit www.ontario.cmha.ca or www.marchofdimes.ca.
- Depression that is treated improves recovery and survival.



Sex and intimacy

After a stroke, you may experience changes that can affect your sexual relationships and intimacy. Some of these changes include:

- fatigue, depression, fear
- loss of feeling on one side of your body
- difficulty communicating with your partner
- changes related to obtaining an erection
- changes related to vaginal dryness

It is up to each person to decide when to return to having sex based on their own readiness.

If you have questions about intimacy or need to talk about it, please speak with your health care provider.

Return to work

Returning to work is an important goal for some people who were working before their stroke.

Stroke affects everyone differently, and recovery is different for each individual. A successful return to work starts with understanding how the effects of your stroke may impact you at work.

If returning to work is important to you, talk to your doctor and rehabilitation team. Getting medical clearance is recommended to make sure that you are able to do your job safely.

It is also important to contact your place of employment as there may be services that can help you return to work. There may also be services available for you if you cannot return to work.

Prevent a fall

A person who has had a stroke can be at higher risk for falls, however, your risk of falls can be reduced. You are at a risk for falling if you have:

- poor balance
- decreased muscle and bone strength
- reduced vision or hearing
- unsafe conditions in and around your home

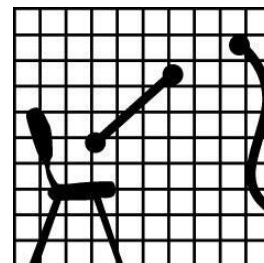
You can help prevent falls by making changes to your home and lifestyle.

Consider a self-referral to Home and Community Care Support Services for occupational therapy and/or physiotherapy assessment. Call 1-800-810-0000 to self-refer.

Consider an emergency alerting system, such as Lifeline.

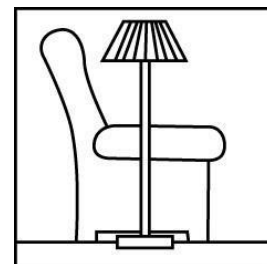
Bathroom

- Make sure that you have non-slip surfaces in the tub or shower.
- Install grab bars by the toilet and bath if you need them to help you sit and stand. Make sure they are well anchored.
- Use a raised toilet seat, and a bath seat in the shower, if you need them.
- Wipe up moisture or spills right away.



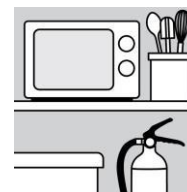
Living room and bedroom

- Reduce clutter! Get rid of loose wires and cords as well as any other obstacles.
- Consider using a cordless phone to avoid rushing to answer.
- Have good lighting throughout the house and install night lights.
- Make sure the path is clear between the bedroom and bathroom.
- Scatter mats are tripping hazards. Get rid of them or make sure they are non-slip.
- Move slowly out of your bed or chair. Getting up suddenly can make you dizzy.



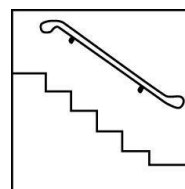
Kitchen

- Store kitchen supplies and pots and pans in easy-to-reach locations.
- Store heavy items in lower cupboards.
- Use a stable step stool with a safety rail for reaching high places.
- Always wipe up any spills right away to prevent slipping.
- If you use floor wax, use the non-skid kind.



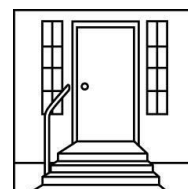
Stairs

- Make sure your stairs are well lit.
- Have solid handrails on both sides of the stairway, if possible.
- Remove your reading glasses when you go up or down the stairs.
- Never rush up or down the stairs. It is a major cause of falls.
- If necessary, lead up with your strong leg and down with your weak leg.



Exterior

- Keep front steps and walkways in good repair and free of snow, ice and leaves.
- Use/add railings whenever possible.
- Keep front entrance well lit.
- Put gardening tools such as hoses and rakes away when not using them.



Eat healthy meals

- Nutritious meals help keep you strong, fight off colds and flu and maintain your balance.
- Do not skip meals. It can cause weakness and dizziness.



Keep fit

Do some activity every day. It is your best defense against falls.

- Maintain or improve your flexibility and balance by keeping active. Try activities such as walking, Tai Chi, aqua fit and yoga. Talk to your doctor before starting an exercise program.
- Build your muscle and bone strength by doing "resistance" activities or exercises (such as weight lifting). Talk to your doctor or therapist before starting weight training activities.
- Have your hearing and vision checked regularly.



Use medication wisely

- If your medication causes dizziness or sleepiness, adjust your activities so you are not at risk of falling.
- Do not mix alcohol and medications. Alone or in combination with medications, alcohol can cause falls.
- See page 8 for more information on medication safety.

Use safety aids

- Wear your glasses and hearing aids.
- Talk to your therapist or family doctor about using a walker, cane or neuro pole. If you use a cane, make sure that it is the correct height and that it is rubber-tipped for safety.
- Wearing the right footwear is important. Comfortable shoes that provide good support can help to prevent falls.
- Find out about other gadgets that can make your life safer. This includes reachers, anti-skid soles, a portable phone, or a long handle shoe horn. There are many types of gadgets or devices to help you. Ask your health care provider for more options.



Tests that may be ordered at your Stroke Prevention Clinic appointment

Ordered	Type of test	Purpose of test	How the test is done
<input type="checkbox"/>	CT Scan (Computerized Tomography)	This test shows detailed images of the brain and helps to identify conditions in the brain.	You lay in a scanner that takes pictures of your brain using special x-rays.
<input type="checkbox"/>	CTA (CT Angiography)	To visualize blood flow in the arteries of the brain.	You lay in a scanner and it uses a CT scan and contrast dye injected into the arteries through an intravenous to take pictures of the blood vessels in the head and neck.
<input type="checkbox"/>	MRI (Magnetic Resonance Imaging)	This test shows detailed images of the brain and helps to identify conditions in the brain. You may need this if your doctor needs to see areas of the brain that cannot be seen clearly on a CT scan.	You lay still in a scanner and it uses magnetic field and radio waves to produce a 3 dimensional picture of the brain.
<input type="checkbox"/>	MRA (Magnetic Resonance Angiography)	To visualize blood flow in the arteries of the brain.	You lay in a scanner and it uses magnetic field and radio waves and may or may not require contrast dye to take pictures of the blood vessels in the head and neck.
<input type="checkbox"/>	Carotid Doppler	To look for a plaque build-up that narrows the arteries in your neck and affects blood flow to the brain.	Uses ultrasound to listen to the flow of your blood through your arteries.
<input type="checkbox"/>	ECHO Bubble Study	To look at the structure and function of the heart. In particular, this test detects if there is a hole in a wall of the heart.	While an echocardiogram is done, bubbles of sterile salt water are injected into the bloodstream.
<input type="checkbox"/>	Echocardiogram	To look at the structure and function of the heart.	Uses ultrasound waves to take pictures of your heart.

Ordered	Type of test	Purpose of test	How the test is done
<input type="checkbox"/>	TEE (Trans-esophageal Echocardiogram)	To look at the structure and function of the heart.	Uses ultrasound waves to look at the structures of the heart. It is done by inserting a tube into the esophagus. You will be sedated for this test.
<input type="checkbox"/>	ECG (EKG) (Electrocardiogram)	To look for abnormal heart rhythms.	Sticky pads are placed on your body and these pads have sensors which detect your heart rhythm.
<input type="checkbox"/>	Holter Monitor or Holter Patch	To look for abnormal heart rhythms for an extended period of time (24 to 72 hours).	It is a portable ECG and monitors your heart rhythm. Electrodes are placed on your chest, which are attached to a small recorder. You will carry this recorder with you in a pouch wherever you go except when bathing.
<input type="checkbox"/>	Loop Recorder or 14 day Holter Monitor	To look for abnormal heart rhythms over a longer period of time (1 to 4 weeks).	Similar to a holter monitor, however, you carry the recorder for a longer period of time.
<input type="checkbox"/>	EEG (Electroencephalogram)	This test records your brainwaves. It is often ordered to look for seizure activity.	Electrodes are placed over the scalp and the brain's electrical activity is recorded.
<input type="checkbox"/>	EMG (Electromyography)	This test looks at the electrical activity produced by your muscles. Your doctor may order an EMG if you have signs or symptoms that may indicate a nerve or muscle disorder.	During any EMG, electrodes are used to record electrical activity in the muscle. In some cases, needle electrodes may be used to insert into the muscle.
<input type="checkbox"/>	Blood tests	To check for any abnormalities in your blood.	Blood is taken from your arm and studied.