



# The Mortar & Pestle



VOLUME 3 ISSUE 2

STAFFORD PHARMACY AND HOME HEALTHCARE

## Vascular Health: What you need to know about Stroke

Every 7 minutes, someone in Canada dies from a stroke. This number is too high as 80% of strokes can be prevented. Keep reading to learn how to decrease your risk of having a stroke.

### What is a stroke?

A stroke is a disruption of blood flow within the brain. Another term for a stroke is a “brain attack”. Blood flow in the brain can be disrupted in two ways.

- 1) A blockage (blood clot or cholesterol build up) - an ischemic stroke
- 2) A bleed—a hemorrhagic stroke

### What is a mini-stroke or transient ischemic attack (TIA)?

A mini-stroke or TIA is a warning that must be taken seriously. When someone has a TIA, they experience one or a number of the signs of stroke. However, these signs disappear in a few minutes or hours. This is a warning that a full blown stroke could occur within a few minutes or up to a year away.

### What are the risk factors for stroke?

There are two different types of risk factors for stroke: those you can change and those you can't. Factors you can't change are your age and gender. As you age your risk of heart disease and stroke increases. Men over 55 and postmenopausal women are at greater risk for heart disease.

### Risk Factors that you can control are:

- High blood pressure (hypertension) - #1 risk factor
- High blood sugar (diabetes)
- High cholesterol

- Obesity
- Alcohol Consumption
- Lack of exercise
- Smoking
- Stress

Choosing a healthy lifestyle is key to preventing the development of heart disease and stroke. Following Canada's food guide and getting 30 minutes of exercise a day are both ways to be heart smart. If you have been diagnosed with high blood pressure, blood sugar or cholesterol it is imperative that these conditions are tightly controlled to reduce your risk of having a stroke

### Prognosis

Many stroke survivors recover after therapy and rehabilitation. However 25% are left with minor disabilities while 40% are left with moderate to severe disabilities. Long term complications of stroke include muscle weakness, pain and spasticity. These complications can drastically affect ones ability to carry out normal daily activities such as walking or getting dressed.

### Treatment

There are two emergency therapies that are used to treat stroke:

- 1) A clot busting drug called “TPA” which must be administered within 3 hours of a person experiencing a stroke.
- 2) Surgery can be used to open up blocked arteries or to remove blood that has pooled in the case of a bleed.

Once a person is stabilized, medica-

tions to treat blood pressure, cholesterol and prevent blood clots will be administered lifelong. A stroke survivor will also undergo intensive rehabilitation to help them re-gain brain and muscle function.

### What are the signs of a stroke?

The signs of a stroke usually come on suddenly and include one, some or all of the following:

- **WEAKNESS OF MUSCLES**, typically on one side of the body
- **CONFUSION** and **DIFFICULTY SPEAKING** or understanding speech
- **HEADACHE** that is sudden and severe
- **LOSS of VISION** in one or both eyes, even if temporary
- Trouble walking, **DIZZINESS** and lack of coordination

### What should you do if you or someone you know experiences signs of a stroke?

**Call 9-1-1.** A stroke is a medical emergency. Like a heart attack, the faster a stroke is treated, the more likely a person is to survive. **If ANY of the symptoms listed are experienced for ANY duration of time call 9-1-1.** There is a 3 hour window in which treatment can be administered.

Ensure your risk of experiencing a stroke is as minimal as possible today! Ask your pharmacist or doctor today to assess your heart health or visit [www.heartandstroke.com](http://www.heartandstroke.com) to take their online assessment.

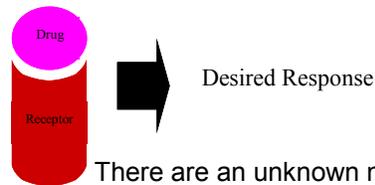
## How do drugs work?

Have you ever taken a pill and wondered how the drug knew where to go after you swallowed it? Or, how does a heart medication know to go to the heart? Well, the answer is, it doesn't!

The “**lock and key model**” shows us how drugs work. In this model, the **drug is the key** and the **receptors** for the drug are the locks. Drugs are designed to attach themselves to receptors within the body based on their shape.

Once swallowed, the medication is absorbed into your bloodstream and distributed throughout your body. When it comes into contact with a receptor it recognizes, it binds to the receptor and does one of the following:

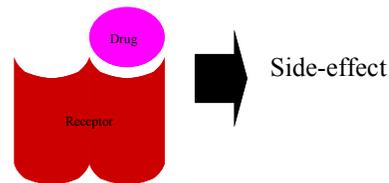
- Activates the receptor inducing a response
- Blocks the receptor and prevents a response



There are an unknown number of different receptors in your body. Medications are designed with the goal of only fitting one receptor and thus only activating one type of response. Just like a key is only made to open one specific lock.

If it was possible to create a drug that truly only interacted with one type of

receptor in the body, there would be no such thing as side effects.



The problem with the lock and key model is that it is the ideal and not the reality. Unfortunately, while a drug interacts with one receptor more than others, it is also able to interact with unintended receptors that have a similar structure. When a drug binds to a receptor that it isn't supposed to, the result is an unwanted response or side-effect.



## Feline Hypertension

We see advertisements and commercials warning us about the silent symptoms of high blood pressure for ourselves, but what about our cats? High blood pressure, or hypertension, is common in cats as they age.

### What causes hypertension in cats?

Hypertension in cats is almost always associated with an underlying condition such as diabetes, hyperthyroidism or kidney disease. Rarely, a cat will develop hypertension alone.

### What are the symptoms of hypertension in cats?

Just as in humans, hypertension is a silent disease that frequently presents with no symptoms.

Some potential symptoms include:

- Rapid heart rate
- Dilated pupils that do not respond to light
- The appearance of blood in the eye chamber
- Sudden blindness

### How is feline hypertension diagnosed?

At your Cat's regular check up, your veterinarian will measure your cat's blood pressure. It is recommended that cats SEVEN years or older have their blood pressure tested at each check up. If your cat has been diagnosed with diabetes, hyperthyroidism or kidney disease they should also be monitored for hypertension at each visit.

### How is feline hypertension treated?

Management of hypertension in cats is similar to humans. If your cat is diagnosed

with hypertension they will require medication administered orally once or twice a day. At Stafford Pharmacy we can ensure that the medication is flavoured so that your cat will love it! Tuna or chicken flavoured liquid or cat treats will make giving your cat medication a breeze!

**If you have questions about your pet's medications ask a member of our pharmacy team today!**

