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CONTACT INFORMATION
Doctor(s) that treat me for Stroke issues

Name:__________________________________________

Specialty:_____________________________________

Address:_______________________________________

City:___________________________________________

State:__________ Zip Code:_______________________

Phone Number:_________________________________

Name:__________________________________________

Specialty:_____________________________________

Address:_______________________________________

City:___________________________________________

State:__________ Zip Code:_______________________

Phone Number:_________________________________

Other Important phone numbers:

• Ambulance, fire department, or other emergency services: 911

Pharmacy:_____________________________________

Other Doctors, Nurses, Therapies:

______________________________________________

______________________________________________
What is a Stroke?

A stroke is a disease that affects the blood vessels of the brain. A stroke occurs when a blood vessel that brings blood to the brain gets blocked or pops open. Brain cells don’t get the flow of blood they need. Without oxygen brain cells die. Then the part of the body they control cannot work. These harmful results are often permanent because brain cells cannot be replaced.

Other names for stroke include:
- Cerebral Vascular Accident (CVA)
- Ischemic Stroke
- Transient Ischemic Attack (TIA)
- Intracranial Hemorrhage (ICH)
- Cerebral Thrombosis

Types of Stroke

There are three types of strokes:

Ischemic Stroke is caused by a blocked artery. This is the most common type of stroke. They can sometimes be treated with “clot busting” drugs.

Hemorrhagic Stroke is caused by bleeding into the brain tissue. This stroke is caused by a popped open blood vessel.

TIA is called a “mini stroke”. It occurs when a blood clot blocks an artery for a short time. The signs of a TIA are like the warning signs of a stroke, but they often last only a few minutes. 10% of all strokes started with TIAs. TIAs are a medical emergency and need treatment right away.
Warning Signs of a Stroke

Warning Signs of a stroke can include:
• Sudden weakness or numbness of the face, arm or leg, especially on one side of the body
• Sudden confusion, trouble speaking or understanding
• Sudden trouble seeing in one or both eyes
• Sudden trouble walking, dizziness, loss of balance or coordination
• Sudden bad headache without known cause

If you notice any of these signs, act FAST

F – Face. Ask the person to smile. Does one side of the face droop?
A – Arm. Ask person to raise both arms. Does one side of the face droop?
S – Speech. Ask the person to say a simple phrase. Is their speech slurred or strange?
T – Time. Diagnosis and treatment of an ischemic stroke must be within 4.5 hours from the time when symptoms started.

If you recognize any of these signs in yourself or someone around you, it could be a stroke - Call 9-1-1 immediately

SPOT A STROKE

F, A, S, T

FACE DROOPING  ARM WEAKNESS  SPEECH DIFFICULTY  TIME TO CALL 9-1-1
Tests to Diagnose Stroke

**CT Scan** - (Computerized Tomography) A test using radiation that takes a series of pictures of the brain. It may be one of the first tests ordered. Results of this test give the Stroke Team helpful information. It can tell the cause, location and size of the stroke.

**MRI Scan** - (Magnetic Resonance Imaging) A scan that uses a large magnetic field to take a series of pictures of the brain. It also shows the cause, location and size of the stroke. MRI images better define soft brain tissue versus CT, and may show brain tissue changes because of a stroke.

**CTA** - (Computerized Tomography Angiography) Sometimes called a Cat Scan, this is a test using the CT Scan and a liquid (dye) that we give through an IV. This helps us see where the arteries and veins are in the brain. This lets the Stroke Team see where there may be blood flow problems.

Treatment of Acute Stroke

The main goal once they suspect or confirm a stroke is to bring blood flow back to the brain. Timing is everything and will affect what treatments are used. It is very important to find out when the stroke signs started.

**Ischemic Stroke (clot in the brain) Treatment**

**Thrombolytic Medicines**

These medicines are also called “clot buster”. They are used to dissolve blood clots that are blocking arteries in the brain. To be most helpful, these meds must be started within 3 hours (and up to 4.5 hours in certain eligible patients) after start of stroke signs.
Endovascular Procedures

Mechanical thrombectomy is a procedure that doctors do to remove a blood clot in the brain. To do this, a doctor will pass a little tube through a large vein (artery) in the groin. This tube goes up to the blocked vein. The doctor takes away the clot with special suction tubes. Endovascular procedures can only be done on certain blood clots in large vessels of the brain.

Hemorrhagic Stroke (bleeding in the brain) Treatment

Endovascular Procedures

Endovascular procedures may be used to treat certain hemorrhagic strokes like the way the procedure is used for treating an ischemic stroke. These procedures are less invasive than surgical treatments, and involve the use of a tube introduced through a major artery in the leg or arm, then guided to the bleeding area. It then drops a mechanical agent, such as a coil, to stop the bleeding.

Surgical Treatment

For strokes caused by a bleed within the brain (hemorrhagic stroke), we may do an operation to stop the bleeding. Your doctor will decide if an operation, or watching you closely, is the best thing to do.

Risk Factors for Stroke

Some risk factors can be controlled, others cannot be changed.

Controllable Risk Factors
- Smoking
- High Blood Pressure
- High Blood Cholesterol
- Overweight and obesity
- Physical inactivity
- Atrial Fibrillation
- Diabetes (high blood sugar)

Uncontrollable Risk Factors

Age stroke affects all ages, but as people age, the greater their risk for stroke.

Heredity risk of stroke is greater in people whose close family members have had a stroke.

Race African Americans have a higher risk of death and disability from a stroke. This is because they have a greater incidence of high blood pressure. Hispanic Americans are also at risk for stroke due to complications of diabetes.

Prior Stroke prior strokes put that person at higher risk of another stroke.

Gender More men have strokes each year than women. But more women die from strokes than men.
Smoking

Tobacco use can cause bad illness such as heart disease, stroke, lung cancer and lung disease.

Close to 25.1 million men and 20.9 million women smoke cigarettes. The nicotine and carbon monoxide in cigarette smoke harm the body in many ways. Electronic cigarettes, also known as e-cigarettes, are not safe and can cause as much damage to your body as regular cigarettes.

Helpful tips to quit smoking:

• Make an agreement with yourself to quit
• Ask your nurse or doctor about “quit smoking aids”
• Go to a smoking cessation class
• Avoid people who smoke

Smoking can make your illness worse. If you smoke, you should stop now. Quitting takes hard work and a lot of effort. But you CAN quit smoking

Resources:

Smokefree.gov
1-800-784-8669
www.smokefree.gov

American Heart Association
1-800-242-8721
http://americanheart.org

American Cancer Society
1-800-227-2345
http://www.cancer.org

American Lung Association
1-800-548-8252
http://lungusa.org

Smoking Cessation Support Group, please contact the Lifestyle Center; A Division of Kaweah Delta Healthcare District
559-624-3400
Preventing Relapse for New Non-Smokers

_Think of yourself as a non-smoker_
- Decide that cigarettes, or any tobacco product is not an option
- Refer to yourself as a non-smoker (not an ex-smoker)

_Watch out for the top 3 triggers_
- Being around smokers
- Alcohol
- Highly emotional situations-(Watch yourself for personal triggers also)

_You can manage your weight when you quit_
- Stay active
- Drink water and eat healthy meals
- Keep low-fat, low calorie snacks on hand. Follow exact dietary and fluid guidelines and/or restrictions your primary healthcare doctor has established.

_You can manage stress when you quit_
- Add stress-reducing activities to your lifestyle
- Use methods that help control your stress

_If you “slip” (smoke or use tobacco products), do not let it turn into a relapse_
- Ask yourself what went wrong
- Fine tune your strategies and recommit to quitting
- One cigarette does not mean that you are a smoker again!

_If you have a relapse, you can get back on track_
- Ask yourself if you still want to quit
- Find a NEW reason to quit
- Revise your strategies, commit to quit, and set a new date
- Join, or rejoin, a support group to help you stay a non-smoker
High Blood Pressure

High blood pressure (BP) is also called Hypertension (HTN). This is the single most important threat that can cause stroke.

80 million adults in the U.S. have high blood pressure. Most people with high blood pressure do not know why they have it. It is easy to find and treat High blood pressure.

Medicines, diet, exercise, and weight loss can help you control your blood pressure.
- Normal Blood Pressure is 120/80.
- High Blood Pressure is 140/90 or higher.
- If you have diabetes, High Blood Pressure for you is 130/80.

High Cholesterol

Close to 36 million American adults have total cholesterol levels above 240 mg/dL.
- Your total cholesterol should be below 180 mg/dL.
- Your triglyceride level should be below 150 mg/dL.
- Your HDL, or good cholesterol, should be 40 mg/dL or higher.
- Your LDL, or bad cholesterol, should be below 70mg/dL.

Please ask to see a dietitian. He/she will help you plan healthy meals. This will help lower both your blood pressure and cholesterol.

1. American Heart Association, www.heart.org
3. CDC, www.cdc.gov
Overweight, Obesity and Physical Inactivity

Close to 65% of people in the U.S. are overweight or obese. If you lose just 5 to 10 pounds, you can lower your blood pressure and cholesterol. This will improve your overall health.

Staying active helps control blood pressure, reduce cholesterol levels and help with weight loss. This will lower your risk for developing diabetes.

It is recommended to get 30 minutes of physical activity a day for 5 to 7 days per week. This could be three 10 minute brisk walks a day.

Ideal body weight is determined by calculating your Body Mass Index (BMI). Your nurse or dietitian can help you in calculating your BMI. The ideal BMI is 20-25.

Atrial Fibrillation

Atrial Fibrillation is a condition that causes the upper chambers of the heart, the atria, to vibrate. The atria are supposed to beat properly to move blood into the ventricle. This vibrating causes blood flow to slow and pool. This can increase the risk of clotting. If a clot breaks loose from the atria and enters the bloodstream, it can get stuck in an artery leading to the brain. This can cause a stroke.

Close to 15 to 20 percent of people who have had a stroke have this heart arrhythmia.

People with atrial fibrillation run a higher risk for stroke (by about 5 percent) per year.

Treatment for atrial fibrillation includes medicines such as Coumadin or Warfarin, Aspirin, Plavix. Your doctor may choose to do a cardioversion. This means the atria are electrically converted back into a normal rhythm.
Diabetes

Diabetes is an independent risk factor for stroke. Many people with diabetes also have high blood pressure, high cholesterol, and are overweight. You can control Diabetes with medicines such as insulin, or diabetes pills. Diet and exercise can also help control diabetes. Your doctor may do a lab test called a hemoglobin A1c. This test will let them know how well your diabetes has been controlled in the last 90 days. The goal is to have a number less than 7.0%.

Ask your doctor or provider for a referral to Kaweah Delta’s Diabetes Education Program at 559-624-2823 or 559-624-2892.

Your Diabetes Risk

Type 2 Diabetes is a metabolic disorder. It is characterized by the body not being able to make enough insulin and/or the body cells being resistant to insulin. This results in an abnormal elevation of blood sugar.

Why should I want to know if I have Type 2 Diabetes?

Type 2 Diabetes rarely occurs alone. People that are newly diagnosed with Type 2 Diabetes usually already have a disease such as High Blood Pressure and/or Abnormal Cholesterol levels. High blood sugar is not just high blood sugar. If it is not treated, high blood sugar will harm large and small blood vessels. Each cell in your body is affected.

What are the risk factors of Type 2 Diabetes?

• Diabetes is more common in African Americans, Latinos, Native Americans, Asian Americans, and Pacific Islanders. But, Type 2 Diabetes is seen across all race/ethnic groups.
• Age over 45 (the older one gets the higher the risk. However, children as young as 8 years of age are being diagnosed with Type 2 Diabetes).
• First-degree relative (sibling or parent) with Type 2 Diabetes.
• Overweight, especially being overweight around the ‘belly’.
• Inactive lifestyle.
• Women who had gestational diabetes or gave birth to at least one baby weighing more than 9 pounds. If your mother had gestational diabetes while pregnant with YOU, you are at risk.
• Having other health problems such as: High Blood Pressure, Abnormal Cholesterol, and other Cardiovascular Diseases.
• Other co-existing factors that could increase your risk – smoking, constant high levels of stress, and depression.
• The more risk factors you have, the more at risk you are of getting Type 2 Diabetes.

Don’t Ask – Don’t Tell – Absolutely NOT!!

• Uncontrolled diabetes is the leading cause of blindness, renal failure, and arm or leg amputations (not related to injuries).
• The leading cause of death in the U.S. is heart disease. 68% of these people had diabetes.
• Two out of three people with diabetes die from heart disease and stroke.
• It is estimated that once a person has Type 2 Diabetes, he or she likely had diabetes for at least 5-7 years before being diagnosed.

Ask your Primary Healthcare Provider for further evaluation. This way you will know if you have Diabetes or are at risk. To help prevent problems of uncontrolled diabetes, it is crucial to have early diagnosis and treatment.
DASH Diet

(Dietary Approaches to Stop Hypertension)

The DASH diet is a diet to stop hypertension or high blood pressure. It is based on research that shows that eating a low fat, low salt diet rich in whole grains, low fat dairy foods, fruits and vegetables lowers blood pressure significantly. It may seem hard or overwhelming to change a lifetime of eating habits. But making a few changes over a couple of days or weeks is often easier than changing your whole diet overnight.

• Add a serving of vegetables at lunch one day and dinner the next. Add a fruit at one meal or snack.
• Increase your use of fat free and low fat milk products to three servings a day.
• Limit lean meats to 6 ounces a day – three ounces a meal which is about the size of a deck of cards.
• Include two or more vegetarian-style or meatless meals each week.

Dietary Tips to Reduce Cholesterol

Eat less saturated fat and cholesterol

• Eat less total fat, even ‘good’ fats such as olive oil. Avoid fried foods, fatty meats and whole milk products. These include cheese and ice cream.
• Select foods low in cholesterol. Cholesterol is found only in foods from animals. Foods from plants contain no cholesterol.
• Choose foods low in saturated fat. Saturated fats are often found in animal fats. You should not eat the three plant oils that are high in saturated fat. These are coconut, palm and palm kernel oils. These oils are often added to packaged foods.
• Use as little hydrogenated and partially hydrogenated fats as possible. Select tub or liquid margarine rather than stick margarine.

Special “Spreads”

Special spreads are made from plants. They have been shown to lower cholesterol. Talk with your dietitian about adding these foods to your diet.
Medications

Anticoagulants and Antiplatelet Medicines

Medicines such as Aspirin and Clopidogrel (Plavix) and Aggrenox stop platelets (a blood cell related to clotting) from clumping together and forming unwanted clots.

Aspirin is recommended for preventing a first stroke in some patients. Along with other antiplatelet agents, it also has an important role in preventing recurrent strokes.

You should not stop these medicines unless you first talk to your doctor. It is also important to tell all doctors treating you that you take these meds. Medicines such as Coumadin (or Warfarin) thin the blood. This stops clots from forming in your arteries. They are different from antiplatelet agents and are recommended mainly for patients with a high risk of stroke. They are also recommended for people with atrial fibrillation. While these drugs are more effective preventing clots in people with atrial fibrillation, they may have side effects. These can include bruising and bleeding. Careful follow up with one’s primary care doctor, along with blood tests to measure warfarin effect, is essential for people taking these drugs. Again, please be sure to tell any doctor treating you that you take these drugs.

Beta Blockers

These medicines decrease the workload on your heart. Beta blockers also are used to relieve chest pain or discomfort. They help prevent more heart attacks. Beta blockers also are used to correct arrhythmias (irregular heartbeats).
**Angiotensin-Converting Enzyme Inhibitors (ACE-I)**

These medicines lower blood pressure and reduce the strain on your heart. Some of these include Captopril, Benazapril, and Lisinopril. They also help slow down further weakening of the heart muscle. Studies have also shown that in certain patients, use of ACE-I's may reduce subsequent stroke incidence even if blood pressure is normal. In diabetics, these drugs may preserve renal function. In patients with kidney disease, these drugs slow decline in renal function. They also prolong time till dialysis is required.

**Angiotensin Receptor Blockers (ARB)**

These drugs work very much like the ACE-I's. However, instead of blocking formation of angiotensin as ACE-I's do, they block the effect of angiotensin on the arteries themselves. Most of the positive effects of ACE-I's as listed above are also noted with ARB's.

**Statins**

These medicines help lower cholesterol in the body. Some of these include Lovastatin or Simvastatin and others. Statins also need to be monitored by your primary care doctor. The dose should be adjusted to provide maximum benefit. Side effects can include muscle soreness and weakness. If you have these effects, tell your doctor immediately.

**Other Medicines**

Medicines may also be given to relieve pain, anxiety, and depression. This often occurs during and after a stroke.

If you need help paying for any of your medicines, please talk to your nurse, case manager, or pharmacist for assistance.
Taking Medications

Here are a few tips for taking your medicines. You need to take most of your medicines every day even if you feel fine. Ask your doctor or nurse about any special issues that have to do with your medicines.

- Have a routine: Take your medicines at the same time each day. Use reminders to help you stay on track.
- Take all your medicines: Some work better when used together with others. Don’t take one and skip another.
- Plan ahead: Refill your prescriptions before you run out.
- Be sure you have them when you travel.
- Never change your dosage or stop taking a medicine without talking to your primary care doctor. If you miss a pill, don’t take two when it is time for the next dose.
- Tell your primary care doctor if you think you are having a side effect to a medication. Your doctor may change the dose or give you a new prescription.
- Carry an up to date list of your medicines. Bring the list with you each time you visit your primary care doctor. The pharmacy where you fill your prescriptions should also know about all the medicines you take even if you do not have the prescriptions filled at the same pharmacy. This will help to prevent any potential medication reactions.
- Use a pill box to be sure you take all your medicines properly every day. If you have difficulty filling the box correctly, ask a friend or relative to help.
- Talk to your doctor if you are having difficulty swallowing pills. For example, if you are coughing or ‘getting stuck’.
What to Expect After Your Stroke

There may be many changes in your life after your stroke. You may have a change in your thinking, your actions, feeling tired, and sadness.

After your stroke, you may not be able to think clearly. You may also have problems remembering things.

Your family may also notice you acting differently. It may be a large change. This change may not be there forever. Over time, you may act more like you did before the stroke.

You may experience feeling extra tired in the weeks to months after your stroke. This tired feeling can occur after your usual daily activities. This is normal. It is important to know your limits and let yourself rest when you need to.

Sadness after your stroke is common. You may be sad because you cannot do the same activities you did before your stroke. You may also be sad about the changes in your life. If you have this kind of sadness, there are people you can talk to or medicine that may help. Contact your doctor if you are having any of these feelings.
Therapy Services
Kaweah Delta has many therapy services to help stroke survivors try to get better. Many of our therapists are trained to work with you in different ways.

**Physical Therapy:**
- Our Physical Therapists will teach you to move better so you can do the things you need to do.
- Help with walking

**Occupational Therapy:**
- Our Occupational Therapists work to help you do daily activities by yourself again.
- Help with dressing yourself

**Speech Therapy:**
- Our Speech Therapists help people get better that have problems with talking, thinking and making choices and swallowing.
- Help with speaking and swallowing.

**Specific Stroke Therapy Services provided by Kaweah Delta:**
- Gait training
- Orthotic Training and Assessment
- Balance training and Assessment
- Strength and conditioning
- Hand Therapy
- Low Vision
- Feeding and Swallowing
- Aquatic Therapies
- Balance and Vestibular
- Cognitive Rehab

If you feel you need our help, please contact your doctor for a referral to one of our clinics:

**Kaweah Delta Rehabilitation Hospital**
840 S. Akers St.
Visalia, CA 93277
(559) 624-3906

**Therapy Specialists**
(Located inside Sequoia Medical Center, 2nd Floor)
820 S. Akers St., Suite 200
Visalia, CA 93277
(559) 624-3427

**Exeter Therapy Specialists**
1131 W. Visalia Road
Exeter, CA 93221
(559) 592-7342