**Patient Guide to Lithotripsy with Lithostar**

**WELCOME**

Thank you for selecting the Stone Institute of the Carolinas. We welcome you as our patient and our guest. Your comfort and satisfaction as well as your swift recovery are our first concerns.

Your procedure will be performed in a safe and comfortable environment, and our trained staff will provide skilled personal care in making your experience as comfortable and pleasant as possible.

Thanks to the marvelous technology of lithotripsy and our unique mobile Lithostar unit, your treatment, as well as recovery, will only take a short time. This booklet is designed to help you understand our program and your role as our patient. If you have questions, we are available Monday through Friday from 8:30 am until 4:30 pm, or you may visit our web site www.stoneinstitute.us.com for more information.

**Please Call:**
Local: (704) 896-2120
Toll Free: (800) 822-5525

**WHAT IS LITHOTRIPSY**

“Lithotripsy” is taken from the Greek words meaning stone fragmentation. The mobile Lithotripsy system called Lithostar focuses low energy shock waves on the kidney stone, breaking it into small particles that can be passed through the urinary system. This procedure is FDA approved.

**BEFORE TREATMENT**

After your physician has scheduled your Lithotripsy, the following is what can be expected:

- We ask that you call our office at your convenience, to review clinical and financial information prior to your procedure.
- A responsible person/adult over 18 years of age should come with you the day of your procedure and wait in the waiting room during your treatment. As a normal precaution this person must be available to drive you home. Illnesses such as a bad cold, flu or other acute change in physical well being should be reported to your urologist, and treatment for your symptoms may be requested.
- Consent forms must be signed before the procedure can be performed. If you are under the age of 18, a parent or legal guardian must accompany you to sign the consent forms and provide all necessary medical information.
- Your total treatment time, from admission to discharge, should be complete within three to four hours. You may return home the same day.

**MEDICAL PRECAUTIONS**

- Do not take aspirin or products containing aspirin for at least seven (7) days before your procedure. Aspirin can interfere with the blood’s ability to clot and stop bleeding. You may take Tylenol for a headache or pain.
- Do not take any non-steroidal anti inflammatory drugs (NSAIDS) 3 days before your procedure. This includes medications like Ibuprofen, Motrin or Aleve.
- Do not take any new medications after you are scheduled for lithotripsy without the permission of your urologist.
• If you are a female below the age of 50, and have not had a tubal ligation, hysterectomy, bilateral oophorectomy or ESSURE procedure, it will be necessary to perform lab studies for the physician to determine if you are pregnant.

*See the complete list of medications you should avoid in your patient information packet REGARDING MEDICATION

• Pain medication may be taken four (4) hours prior to your procedure time, with small sips of water. (Review the medication list for medications you should not take)
• Do not take any over the counter/non-prescription drugs on the day of your procedure.

WHAT TO DO THE NIGHT BEFORE
• You should not eat or drink within 6 hours of your arrival time. (If you have a medical condition that would not allow you to do this, please discuss it with your physician prior to your treatment).
• Do not drink any alcoholic beverages the day before or the day of your procedure.
• Get a good night’s sleep.

THE MORNING OF YOUR TREATMENT
• DO NOT eat or drink anything at least six (6) hours prior to your arrival time.
• You may brush your teeth, but do not swallow any water or toothpaste.
• Take any medications as directed by your physician or the Stone Institute, with a small sip of water.
• Wear loose, comfortable clothing, such as a warm-up suit and low-heeled shoes. It is best to wear clothing without buttons, zippers or snaps at the waist area so the stone(s) may be easily visualized.
• Leave all your valuables at home.
• You will be instructed to arrive at the hospital early to allow ample time for proper evaluation and preparation.

THE DAY OF YOUR PROCEDURE
• When you arrive at the mobile Lithotripsy site, report to the receptionist with any forms, orders or X-rays sent with you by your physician. You may be asked to take them with you to the nursing unit that will be preparing you for your procedure.
• You will be asked to sign a general consent for treatment and for the release of information to your insurance company.
• A nurse will prepare you for your procedure by:
  1. Reviewing step-by-step instructions of the procedure;
  2. Completing any additional forms or paperwork necessary for treatment;
  3. Taking your temperature, pulse, and blood pressure, starting an IV, administering pre-operative medications ordered by your physician;
  4. Arranging for any additional lab work, X-ray studies, or other tests.
• Your family member or responsible adult will be made comfortable in the hospital waiting area and will be informed of your progress.
• Your physician will meet you in the mobile unit, and will speak with your family member(s), or the adult that has accompanied you to the hospital, after the treatment is complete.
• After the procedure, you will be taken to the recovery area and monitored until you are ready to be discharged.
• Your physician will determine your discharge time, which may vary slightly from patient to patient.
• Written discharge instructions will be given and reviewed with you by a recovery nurse.
• You will be escorted to your car to be driven home by your family member or the responsible adult that has accompanied you to the hospital.

**DURING TREATMENT**

Treatment with the lithotripter is quite simple:

• To begin the procedure, you will be comfortably positioned on the treatment table. (This technology does not involve water)
• An X-ray monitor will be used to confirm the exact location of the stone(s).
• You will receive mild sedation to help you relax during the procedure. General anesthesia is extremely rare during lithotripsy. This is a major factor in the speed of treatment and recovery.
• The shock wave applicator will be positioned against the side of your body. It will then direct a series of impulses to your kidney stone, breaking the stone into small particles.
• The only thing you will feel is a tapping sensation where the applicator touches your skin and there will be a clicking sound from the unit. Each impulse lasts only a fraction of a second, and the procedure takes approximately 35-45 minutes. Recovery from the procedure is usually an hour.
• During the procedure your physician will follow the fragmentation process on X-ray video equipment.

**AFTER THE TREATMENT**

The effectiveness of the treatment may not be evident immediately following the procedure. The stone fragments will still be in close proximity to one another, therefore, for the first few days it will be difficult to determine by x-ray how well the stone has fragmented. It can take several days to several weeks for all of the stone particles to pass through your system.

Your physician may prescribe medication for discomfort or special conditions. With Lithostar®, additional treatments are seldom necessary. Your physician will give you full instructions for monitoring your progress and may prescribe a special diet and/or medication, depending on your medical history and condition.

If questions arise after discharge, contact your physician or urologist. Lithostar® treatment is generally painless, however the procedure often has some minor aftereffects. These may include:

• **HEADACHE**- Many patients develop a headache coming to their procedure and this can last well after the treatment is completed. This is caused by emotional stress accompanying medical treatment and the fact that the patient has not had breakfast. Going home, relaxing, having something to eat and taking Tylenol or the pain medication prescribed by your doctor will almost always relieve your pain. *Do not begin taking your blood thinners or aspirin products for 48 hours after your treatment or until you do not see blood in your urine, unless otherwise instructed by your physician.*

• **DEHYDRATION**- Since you have consumed little water prior to the procedure, we suggest that you begin taking water or clear carbonated beverages in small incremental amounts. If this is tolerated, then small, incremental amounts of solid food such as crackers may be added gradually. Frequent small meals are better than infrequent large ones until the effects of sedation have worn off and you feel normal.

• **SORE THROAT**- Occasionally, patients will have a dry or sore throat following the procedure. This is caused by breathing nasal oxygen and normally is not severe and disappears within 24 hours.

• **DROWSINESS**- Because mild sedation is used in the procedure, it is not uncommon for patients to feel tired, sleepy and lethargic afterward. This is normal and is usually gone within 24 hours, although it can last several days with some sensitive individuals. Common sense is the best guide in resuming regular activities.
If you feel tired and lethargic, the body needs to rest. If you feel strong and alert, you can do whatever the urologist agrees is allowable and safe.

• **DISORIENTATION** - Lithotripsy requires mild sedation and rarely anesthesia. However, as a precaution, it is best not to engage in activities that require coordination or balance—such as driving a car or riding a bicycle—until all effects have completely worn off. This usually takes less than a day.

**WHEN TO CALL YOUR DOCTOR**

Should any of the following problems arise after your treatment or you have concerns after the procedure, call your urologist or whomever is on call for him.

• Passing Large Clots (*It is normal to see some blood in your urine initially*)
• Fever ≥ 101°F, Chills and Shaking
• Dizziness, Fainting
• Pain uncontrolled by your medication
• Difficulty Breathing
• Chest Pain
• Loss of consciousness, other than normal sleep

If you are unable to reach a doctor, call 911.

**INSURANCE AND FINANCIAL ARRANGEMENTS**

The Stone Institute wants to make your means of payment as uncomplicated as possible. To do so, we have developed these basic guidelines:

1. Insurance will be accepted and credit allowed according to the benefits and coverage’s of your insurance policy.

2. You will be notified before your procedure of any expected payment. If insurance credit cannot be allowed based on your policy limitations or you do not have insurance, you will be expected to pay for all services. Arrangement should be made with Stone Institute for payments. We accept personal checks, money orders, and most major credit cards.

3. If insurance Pre-Certification is required, this must be done by you or your doctor’s office.

**WORD OF THANKS**

The Stone Institute would like to thank you for selecting Lithostar® treatment as an alternative solution to your medical problem. We appreciate your comments or suggestions if you feel there is anything we may do in the future to make our procedure more comfortable for you and other patients.

**OUR SERVICE AREA**

| Carolinas Medical Center – Mercy | Carolina Surgical Center |
| CMC – Cleveland | Edgewater Surgical Center |
| CMC – Lincolnton | Gaston Memorial Hospital |
| CMC – Northeast | Lake Norman Regional Medical Center |
| CMC – Pineville | Presbyterian Hospital - Matthews |
| CMC – Union | Presbyterian Orthopaedic Hospital |
| CMC – University | Stanly Memorial Hospital |