

ASCENSION ST VINCENTS HISTOTRIPSY PATIENT HANDOUT

Radiologist who performed your procedure:

Procedure Description:

- Ultrasound-guided histotripsy is a noninvasive treatment that uses focused ultrasound energy to destroy targeted tissue (such as a mass) without incisions or needles entering the body. It works by creating microscopic bubbles within the tissue that rapidly expand and collapse, breaking the tissue apart.
- During the procedure, a radiologist uses ultrasound imaging to precisely target the area being treated. You will lie on a treatment table, and a special ultrasound device is placed against your skin over the treatment area. The skin is cleaned, and coupling gel is applied to help transmit the ultrasound energy. The focused ultrasound energy is delivered in short pulses to the targeted area while surrounding tissues are spared as much as possible.
- The procedure usually takes 1-3 hours (sometimes longer). You will then be observed for several hours to monitor for any complications.
- Most patients go home the same day; however, some patients may be kept in the hospital overnight or, rarely, longer.
- Over weeks to months, the body gradually absorbs the treated tissue, typically leaving only a small scar where the mass was located.
- CT or MR imaging is performed several months after the procedure to confirm successful treatment. Longer-term CT or MR imaging may also be needed.

Benefits:

- Noninvasive treatment that does not require incisions or needles entering the body.
- Uses imaging to precisely target the treated area while sparing surrounding tissues as much as possible.
- Can destroy targeted tissue without the use of heat or radiation.
- May be an option for patients who are not good candidates for surgery.
- Typically associated with shorter recovery time compared with surgical procedures.
- Most patients tolerate the procedure well.

Risks & Potential Complications:

- The following list includes some, but not all, possible complications.
- Pain is common but usually mild, typically resolves within a few days, and can be managed with over-the-counter pain medication. Severe pain can occur but is uncommon.
- Minor bleeding is common and usually does not require medical treatment. Any resulting bruising typically resolves on its own over several days. Serious bleeding that requires medical treatment (such as hospital admission, blood transfusion, or an additional procedure or surgery) can occur but is uncommon.
- Infection can occur but is uncommon. Most infections are mild and can be treated with antibiotics.
- Injury to nearby organs, bowel, blood vessels, or nerves can occur but is uncommon.

- Incomplete treatment or regrowth of the mass can occur and may require repeat treatment or surgery.
- For liver histotripsy, injury to the bile ducts in or near the liver can occur. In some cases, this may require additional procedures or surgery, temporary drain placement, and/or hospital admission for treatment.
- For renal histotripsy, blood in the urine or injury to the urinary system can occur. In some cases, this may require additional procedures or surgery, temporary drain placement, and/or hospital admission for treatment.
- Bruising or skin irritation at the treatment site can occur.
- Feeling faint or lightheaded (a vasovagal reaction) can occur during or after the procedure. This is usually mild and resolves quickly.
- Allergic reactions to the local anesthetic, topical antiseptic or other medications are uncommon.
- Death can occur but is rare.

Alternatives:

- Surgical removal of the treated area in appropriate patients.
- Image-guided thermal ablation (such as radiofrequency, microwave, or cryoablation).
- Image-guided embolization or other minimally invasive therapies, depending on the condition being treated.
- Radiation therapy or systemic medical treatments in select cases.
- Observation with imaging follow-up in select patients when immediate treatment is not required.
- Some patients choose no further treatment; however, this may allow the condition to persist or worsen and is generally not recommended.

Post-Ablation Syndrome:

- After thermal ablation, approximately 20-40% of patients experience a group of symptoms called post-ablation syndrome. This syndrome is a temporary inflammatory response that can occur as the body reacts to destruction of the mass.
- Common symptoms include low-grade fever, fatigue or malaise, nausea, body aches, and other flu-like symptoms.
- Symptoms usually begin within 1–3 days after ablation and typically resolve within 7 days.
- Symptoms can usually be managed with rest, drinking plenty of fluids, acetaminophen (Tylenol) and anti-nausea medications.
- Contact your provider if symptoms are severe, last longer than one week, or if you develop a high fever (greater than 102°F).

Aftercare Instructions:

- Avoid strenuous physical activity for at least 1 week after your procedure. Then gradually increase your activity level as tolerated.
- It is normal to experience pain and bruising after your procedure. You may take acetaminophen (Tylenol) for the first 24 hours. After 24 hours, you may switch to aspirin, ibuprofen (Motrin), or naproxen (Aleve) if acetaminophen does not adequately control your pain.
- For renal mass histotripsy, you may notice a small amount of blood in your urine after the procedure. This is normal if it is mild and decreases over time.

- Contact Radiology or your ordering provider if you have any concerns or experience any of the following: severe pain not responding to medications; significant pain or swelling at the procedure site; significant or increasing blood in your urine; signs of possible infection (severe pain, high fever, or foul-smelling urine); shortness of breath and/or chest pain worse than normal for you; dizziness or lightheadedness when standing; or a faster-than-normal heart rate. Call 911 in the event of an emergency.
- Weekdays 8 am to 5 pm call 308-8401 (Riverside), 296-3886 (Southside), 602-1360 (Clay) or 691-1297 (St Johns). Weekdays 5 pm to 10 pm or weekends 6 am to 10 pm call 308-8401. If outside of these hours, call the hospital operator at 308-7300 and ask to speak to the Interventional Radiologist on call.