# MINIMALLY INVASIVE SURGERY

SAGE surgeons are skilled in multiple types of minimally invasive surgery. Instead of using a single long incision, the surgeon makes several small incisions and performs surgery with the aid of a small camera and special instruments. The primary advantage of minimally invasive over traditional open surgery is decreased post-operative pain, which generally requires less pain medication and provides your pet with a more rapid return to normal attitude and appetite.

The following types of minimally invasive surgeries are performed by SAGE surgeons.



# **ARTHROSCOPY**

Commonly performed arthroscopies include shoulder, elbow, knee, and ankle joint evaluations and treatments.



### LAPAROSCOPY (ABDOMEN)

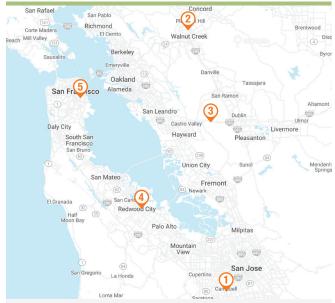
When traditional open surgery is not required, our surgeons can use laparoscopy to assess abdominal structures and biopsy organs. Laparoscopy may also be used to perform cryptorchid neuters (for retained testicles), prophylactic stomach tacking (gastropexy), and spays (ovariohysterectomy or ovariectomy).



#### THORACOSCOPY (CHEST)

This procedure allows SAGE surgeons to assess the organs inside the chest, as well as to obtain biopsies. Thoracoscopy can sometimes be used to remove part of the pericardial sac (pericardiectomy) to treat fluid accumulation around the heart. It can also be used to remove infected or cancerous lung in certain cases.

# SAGE LOCATIONS













3 SAGE DUBLIN 7121 Amador Plaza Rd Dublin, CA 94568 925-574-7243



4 SAGE REDWOOD CITY 934 Charter St Redwood City, CA 94063 650-417-7243



SAGE SAN FRANCISCO 600 Alabama St San Francisco, CA 94110 415-566-0540

Visit our website at <u>sagecenters.com</u> for more information.



# **SURGERY**



COMMITTED TO ADVANCING VETERINARY MEDICINE AND IMPROVING PET CARE



# **SURGICAL EXCELLENCE**

Each SAGE hospital has a team of veterinary surgeons trained in the diagnosis and treatment of all surgical problems. Following veterinary school, our board-certified surgeons each completed several years of additional training in advanced surgical techniques and procedures.

## **SAGE** provides the following surgeries:

- Orthopedic techniques for fractures and joint reconstruction
- + Joint replacement surgeries
- Replacement resurfacing procedures
- Thoracic and abdominal surgery
- Reconstructive surgery
- + Oncologic surgery
- Minimally invasive surgery

Common surgeries performed on cats and dogs include surgeries for problems of the hip, knee, and elbow, fracture repair, biopsies, and removal of cancerous masses. Surgery may also be necessary to repair open wounds or to explore an undiagnosed problem.



In addition to scheduled surgeries, SAGE surgeons are also on-call for emergency situations.

Common emergency surgeries include surgery to remove a foreign object from the stomach or intestines; cesarean section for cats or dogs having difficulty with labor; surgery to address life-threatening abdominal hemorrhage (usually splenectomy); and surgery to correct gastric dilatation volvulus (bloat).

**SAGE**CENTERS.com



Your pet may be referred to our surgery department if they require an advanced procedure or one that requires specialized equipment.

Each SAGE hospital has multiple state-of-the-art sterile operating rooms, and our doctors and staff are committed to maintaining the highest levels of safety and cleanliness. SAGE hospitals also have the benefit of **24-hour post-operative monitoring**, which is not available in most non-specialty hospitals.

At your consultation, the surgeon will perform a thorough physical examination of your pet and review any medical records provided by your primary care veterinarian. The surgeon may recommend additional diagnostic imaging, such as X-rays or a CT scan. Our staff will answer any questions you have about your pet's condition. From there, your doctor will communicate possible treatment options and recommendations.

Our surgeons frequently collaborate with specialists from other SAGE departments on a patient's care. A surgeon may work with a SAGE oncologist to remove a patient's tumor or work with an emergency clinician to treat a patient with a fracture or obstruction. This team-based approach to medicine helps ensure that your pet has access to the most advanced medical and surgical care, all under one roof.

If your pet is "transferred" from one service to another, you can rest assured that all doctors involved are kept up-to-date on your pet's condition and treatment plan.

# PAIN MANAGEMENT

At SAGE, our doctors and staff recognize the need for pain management in our patients. We address pain via many pathways, ranging from the administration of medications to providing cozy cage or kennel bedding.



We understand that by paying attention to our patients' comfort, we can decrease their stress response even without drugs.

This is important because increased stress response is linked to prolonged recovery, delayed healing, and possible compromise to the immune system.

SAGE's emphasis on minimizing pain extends to surgical techniques. All of our surgeons have gone through extra training to help minimize tissue trauma and inflammation, leading to shorter recovery times.

Following surgery, patients recover in our 24-hour critical care unit (CCU), where they receive continuous monitoring and support. We start rehabilitation immediately after surgery by having our veterinary technicians apply frequent cold compresses to post-operative patients overnight. Our dedicated critical care staff is also responsible for providing nutrition, medication, and TLC.

After surgery, there are several things your surgeon will ask you to do at home to help your pet heal as quickly as is appropriate. Activity will likely need to be restricted for several weeks. Additionally, your pet should not be allowed to lick, chew, or scratch at the surgical site. For orthopedic surgery, certain physical rehabilitation exercises may also be recommended. Detailed written homecare instructions from your doctor will be provided when your pet is released from the hospital.

