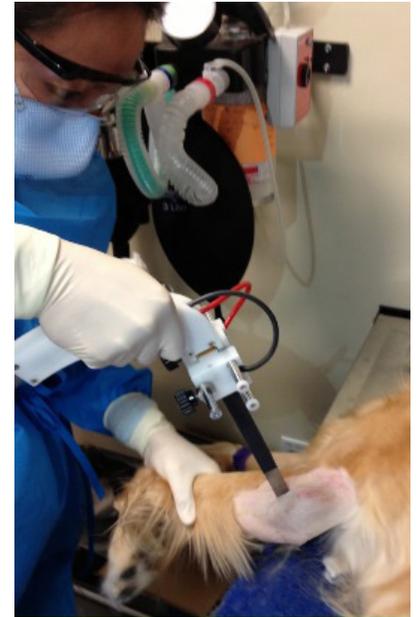


What is electrochemotherapy (ECT)?

[Chemotherapy](#) drugs have several barriers to getting into cells, the biggest one being the cell membrane (outside wall of the cell). To get around this we can use ECT, which combines electroporation and chemotherapy. Electroporation delivers electric pulses to cells to increase pores (holes) in the cell membrane. If there is chemotherapy in the area of the cell, the chemotherapy can penetrate the cell membrane during the delivery of the electric pulses and enter the tumor cell more readily to help combat tumor growth.

What tumor types can be treated with ECT?

- Tumors of the mouth (including melanoma, acanthomatous epulis, squamous cell carcinoma, fibrosarcoma)
- Nasal planum (tip of nose) tumors
- Soft tissue sarcomas (after surgery to help kill residual tumor cells or for tumors that are inoperable)
- Mast cell tumors (after surgery to help kill residual tumor cells or for tumors that are inoperable)
- Melanomas (including skin and mouth)
- Tumors around the anus or rectum
- Tumors around the eye
- Carcinoma of the skin
- Some nasal cavity (within the nose) tumors
- Lymphoma restricted to one site externally (skin, around the eye, one lymph node)
- Papillomas
- Mammary tumors
- Many other tumor types



ECT being administered

What are the side effects?

Systemic side effects (nausea, vomiting, organ damage) are highly unusual, given that ECT uses a relatively low chemotherapy dose and limits treatment to the tumor site itself. Typical side effects that may occur include local reactions such as inflammation, redness of the treated site, itchiness of the skin, and discomfort at the treatment site. These side effects typically are temporary and peak about 1-3 days after the treatment. These side effects are managed with pain medications, anti-inflammatories, and cold-packing the treated site for 1-7 days after the treatment.

What is involved in the treatment process?

Patients are dropped off in the morning fasted. Your pet will undergo very light, short (5-10 minutes) anesthesia for the treatment. Chemotherapy is injected into the treatment site directly, intravenously, or a combination of both depending on the tumor type and the treatment site characteristics. Patients can go home by the end of the day.

Where is this offered?

SAGE was the first veterinary practice in California to offer ECT. While SAGE specialists in any of our four locations can recommend ECT, it's currently being performed at [SAGE Dublin](#), [SAGE Concord](#) and [SAGE Redwood City](#).