

Radiofrequency Surgery: Ellman unit

- Active electrode, antennae (passive electrode), transformer
- Radiosurgery is the passage of HIGH frequency radio waves through soft tissue to cut, coagulate, and/or remove the target tissue.
 - Resistance of the tissue to the radio waves causes water in the cells to heat and the cells to vaporize.

★ **IDEAL FREQUENCY: 3.8 MHz**

★ **NO PACEMAKERS!**

★ **NO FLAMMABLE FUMES/LIQUIDS!**

★ **NEEDS MOISTURE TO WORK**

- Loop and bent tip most common tips in eye care. (Blue sleeve = reusable)

❖ **Setting #1: Pure Cut = 90% cut / 10% coag**

- **Used for BIOPSIES**
- Also used for incisions, chalazion

❖ **Setting #2: Cut/Coag = 50% Cut / 50% Coag**

- Used for removing benign lid lesions
- Useful for vascular regions
- Great for excising skin tags and verruca
- **MOST USED SETTING IN EYE CARE!**

❖ **Setting #3: 90% coag / 10% cut**

- Used for epilation and punctal occlusion

❖ **Setting #4: Fulguration**

- Doesn't penetrate deeply - superficial treatment
- Electrodessication (papilloma bed)
- Destruction of remnants
- Intentional destruction of diseased tissue, i.e. BCC, SCC