FREQUENTLY ASKED QUESTIONS

Q. The best generator output choice to use with the TouchSoft is a low voltage, depth limited output designed for contact coagulation. Why? How do I find them?

A. These outputs are increasingly available as an output choice on electrosurgery generators marketed to GI. The gi4000 has Touchsoft® Coag. Soft Coag® is available on the Erbe ICC and VIO series, and the Olympus ESG 100, among others.

These are low voltage waveforms that don’t produce any cutting and are suggested for use with broad surface monopolar electrodes. The TouchSoft Coagulator® is one of the first accessories designed specifically to take advantage of this output mode. In addition to the low voltage characteristic of the waveform which helps prevent sticking, the output tends to have ‘self-limiting’ power delivery much like typical GI bipolar applications. With the TouchSoft, physicians can achieve a gentle, depth limited, coagulation or ablation using a monopolar contact method.

Q. What power setting? It is suggested that physicians start with a power setting in the TouchSoft or Soft Coag mode between 40 and 60 watts. In these modes, this will be the starting power, as the power will rapidly and automatically drop off as the tissue coagulates.

Q. Will a standard “COAG” that is routinely used for polypectomy work?

A. Yes, but the physician must be more vigilant not to use too high of power or too long of application times. Pre-clinical data supports a power setting of less than 25 watts with duration of two seconds or less. The usual ‘constant power’ standard “Coag” output that is well documented as ideal for snare polypectomy might cause some sticking of the electrode to the tissue if power is too high or activation times are too long.

Q. Please compare the technical aspects of a TouchSoft Coag with other waveform outputs.

A. TouchSoft outputs have very low (usually less than 200Vp) voltages with a ‘narrow’ power curve: the starting power drops off rapidly and automatically as the tissue is coagulated. This promotes self-limiting depth of tissue destruction which is often desirable in the gut. It also helps prevent sticking of the accessory to tissue. The power curve and voltage characteristics of TouchSoft outputs are nearly identical to the best GI bipolar outputs used with bipolar probes—another blunt surface accessory, used where self-limiting depth of penetration with little sticking is helpful. In contrast, standard ‘Coag’ outputs are ideal when used with polypectomy snares where a little cut along the wire surrounded by adequate coagulation is desired. These outputs have higher voltage peaks than TouchSoft. Their power curve is broad and flat, meaning that the power output stays pretty constant over the entire activation. This flat power curve helps ensure that adequate power is available throughout the resection and helps keep a snare from getting entrapped. When used with the TouchSoft, it works, but the self-limiting advantage is lost and the higher voltage can lead to more sticking. To compensate, the user should be sure to use low powers (always less than 25 watts) and activate less than two seconds at a time: don’t ‘overcook’.
Examples of the “Power Curves” (power to impedance) just discussed:

TouchSoft® Coag (at three initial power settings)

“Standard” COAG (at three initial power settings)

BIPOLAR (at three initial power settings)

TouchSoft® is a registered trademark of Genii, Inc. SoftCoag® is a registered trademark of Erbe Electromedizin. Always read the manufacturer’s instructions for use carefully before using any device.

Further reading:
