

Figure 3.1A.

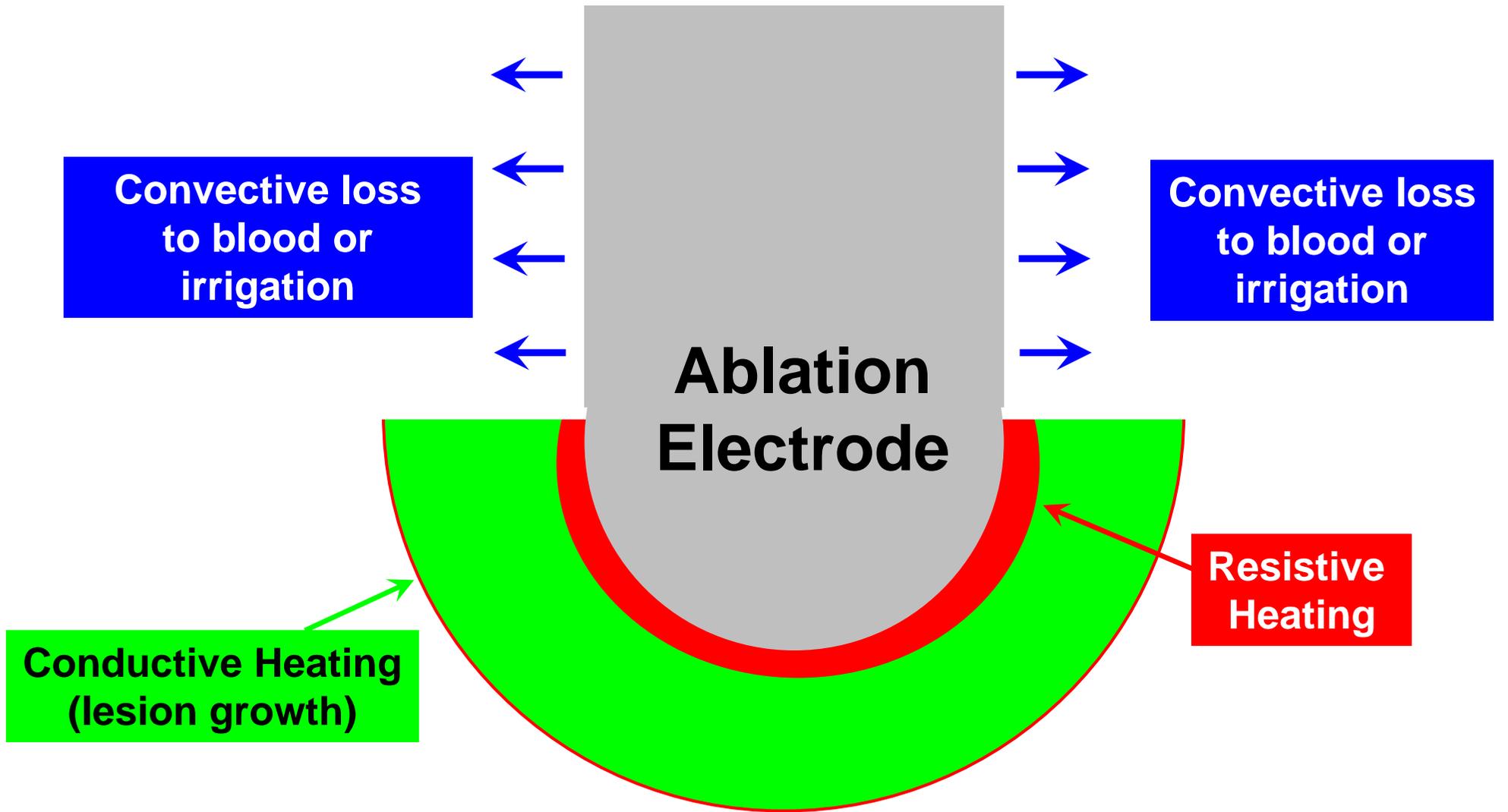


Figure 3.1B.

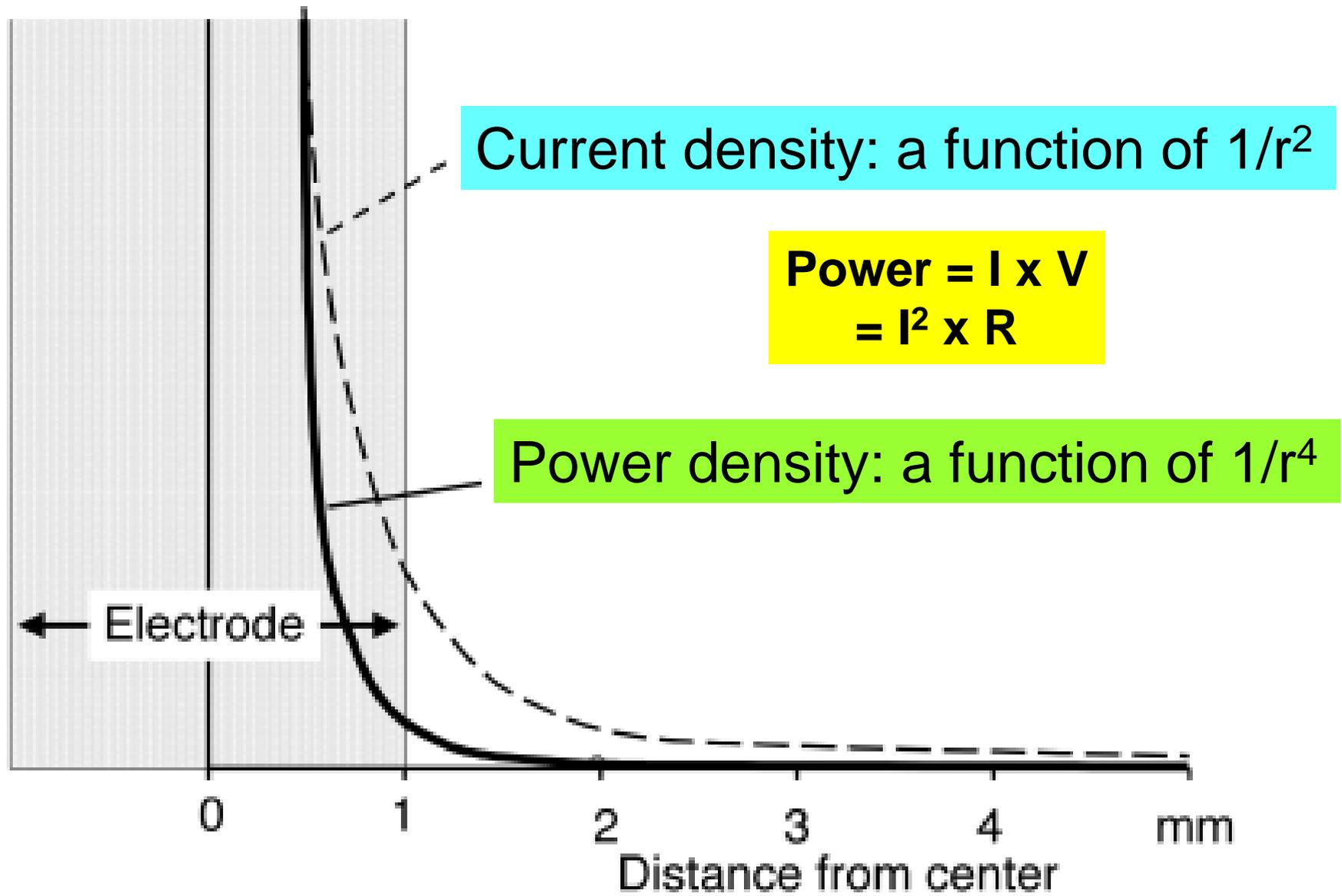


Figure 3.2A.

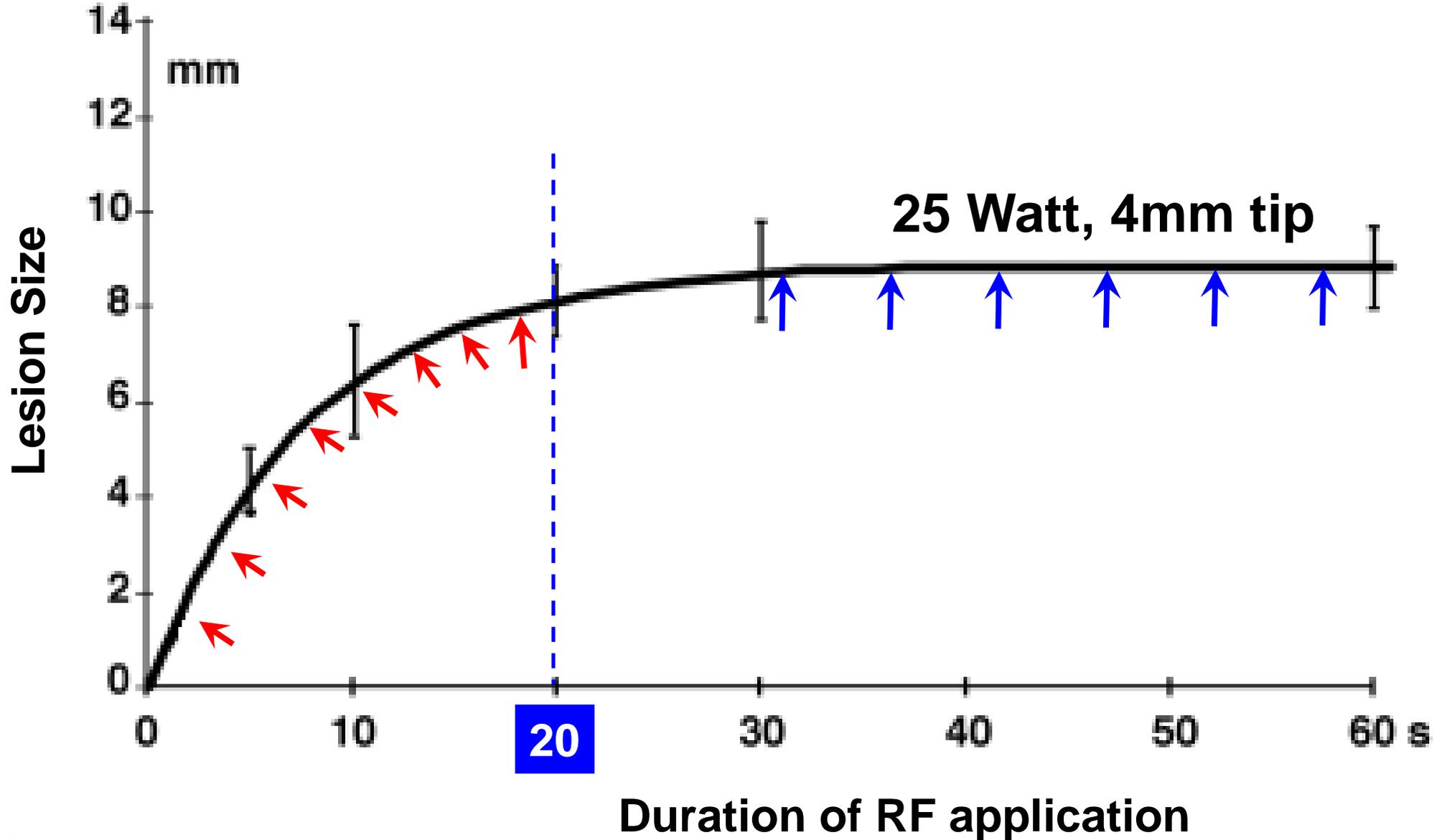


Figure 3.2B.

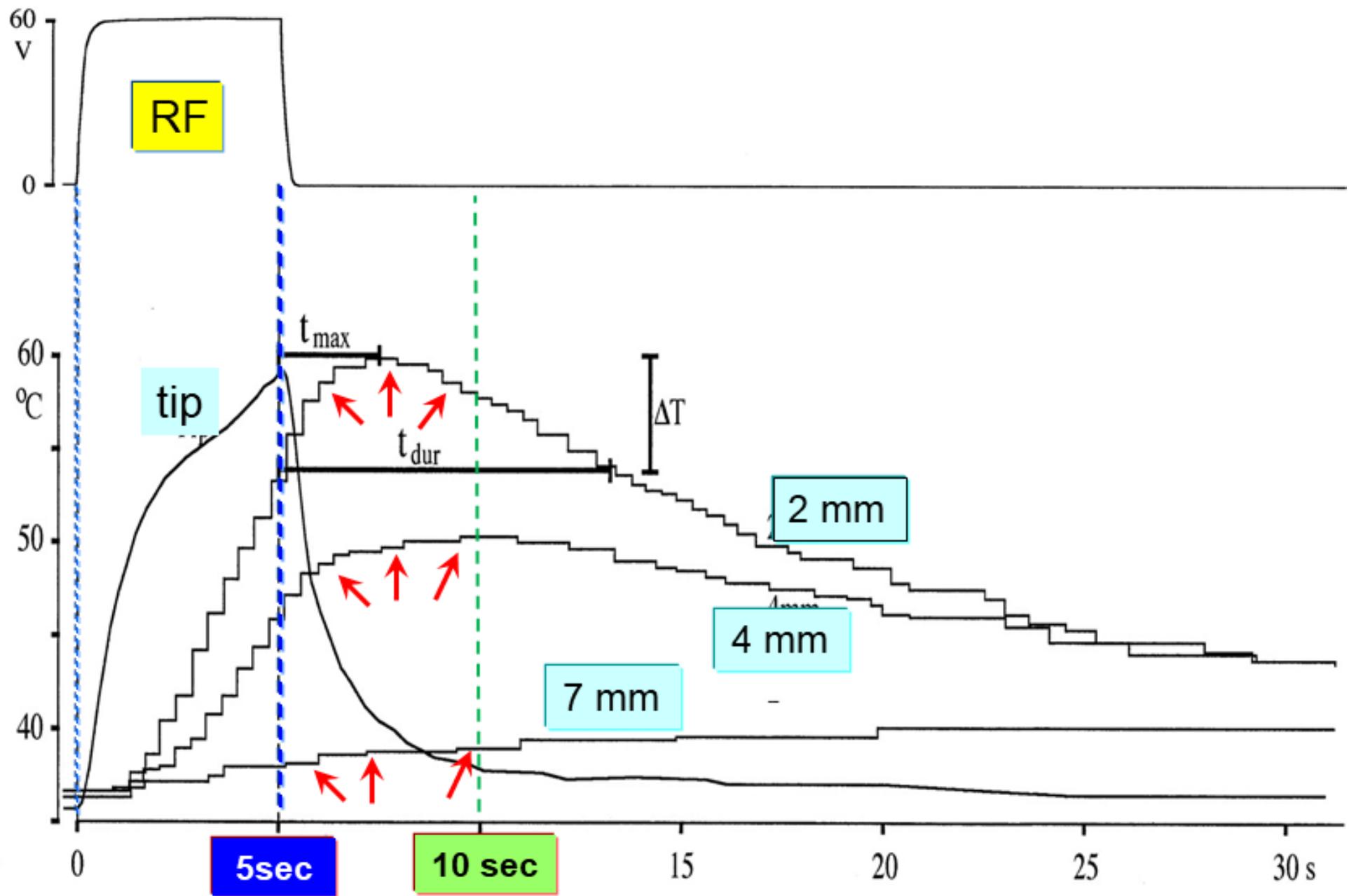


Figure 3.3

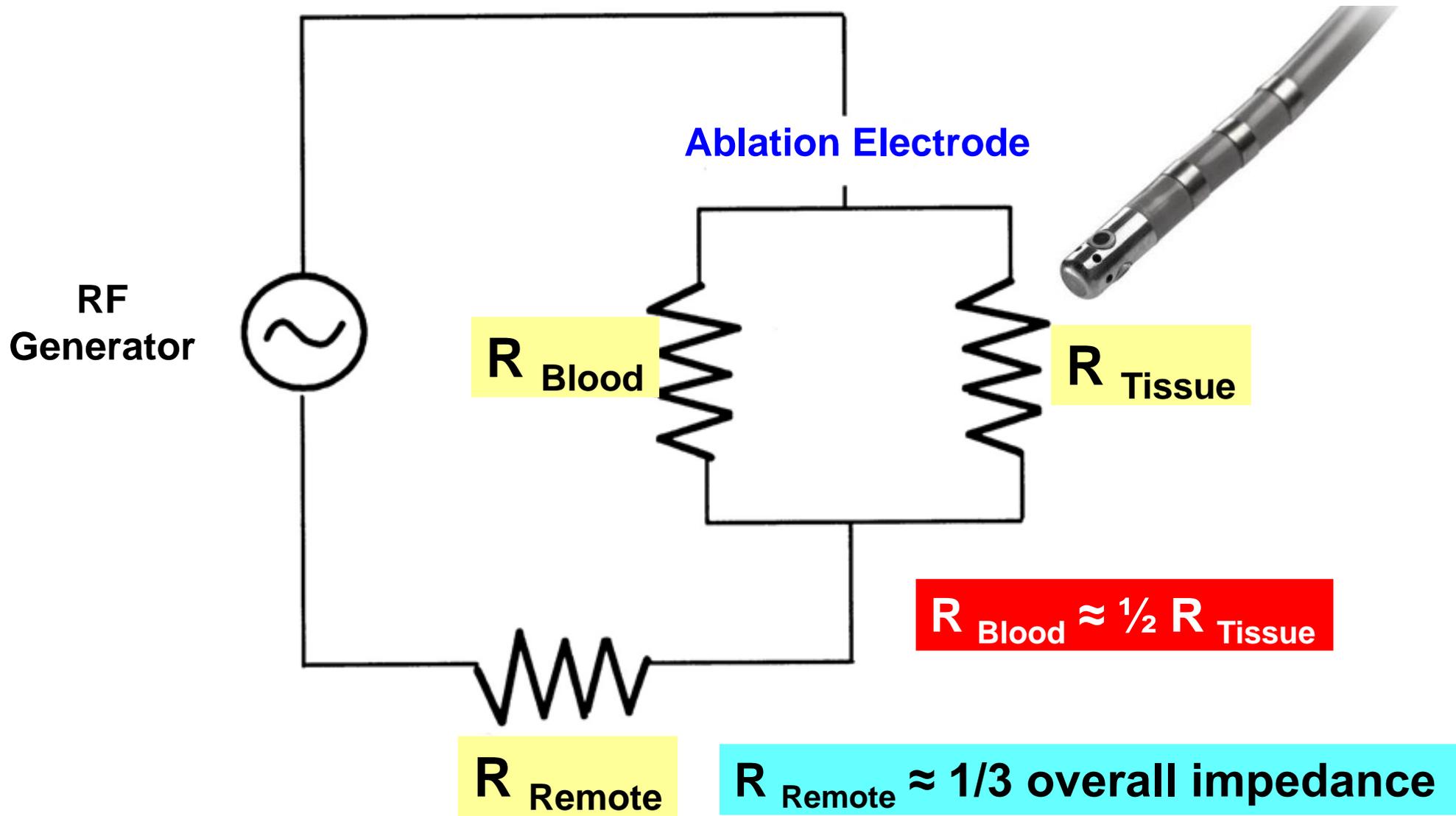


Figure 3.4A.

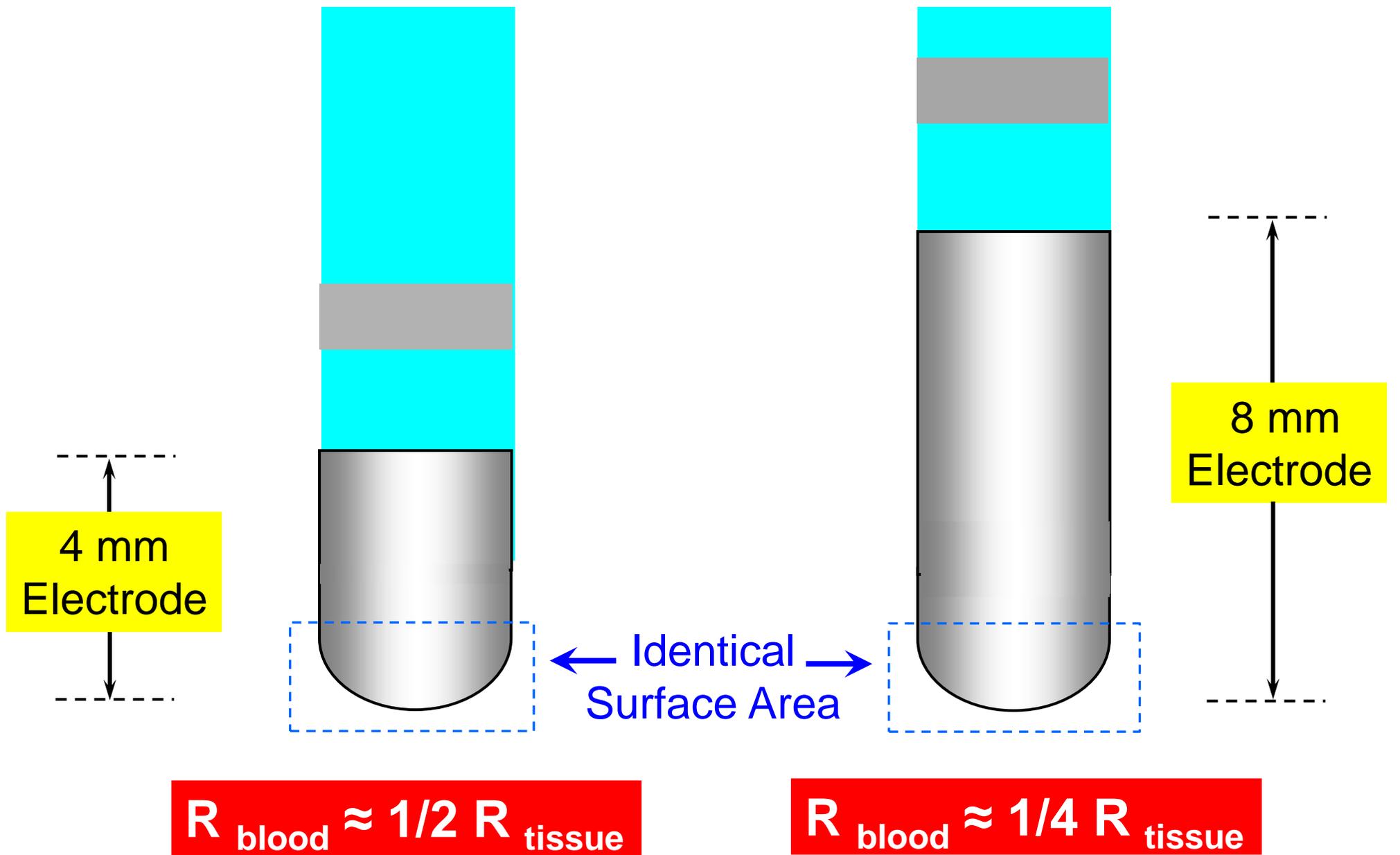


Figure 3.4B.

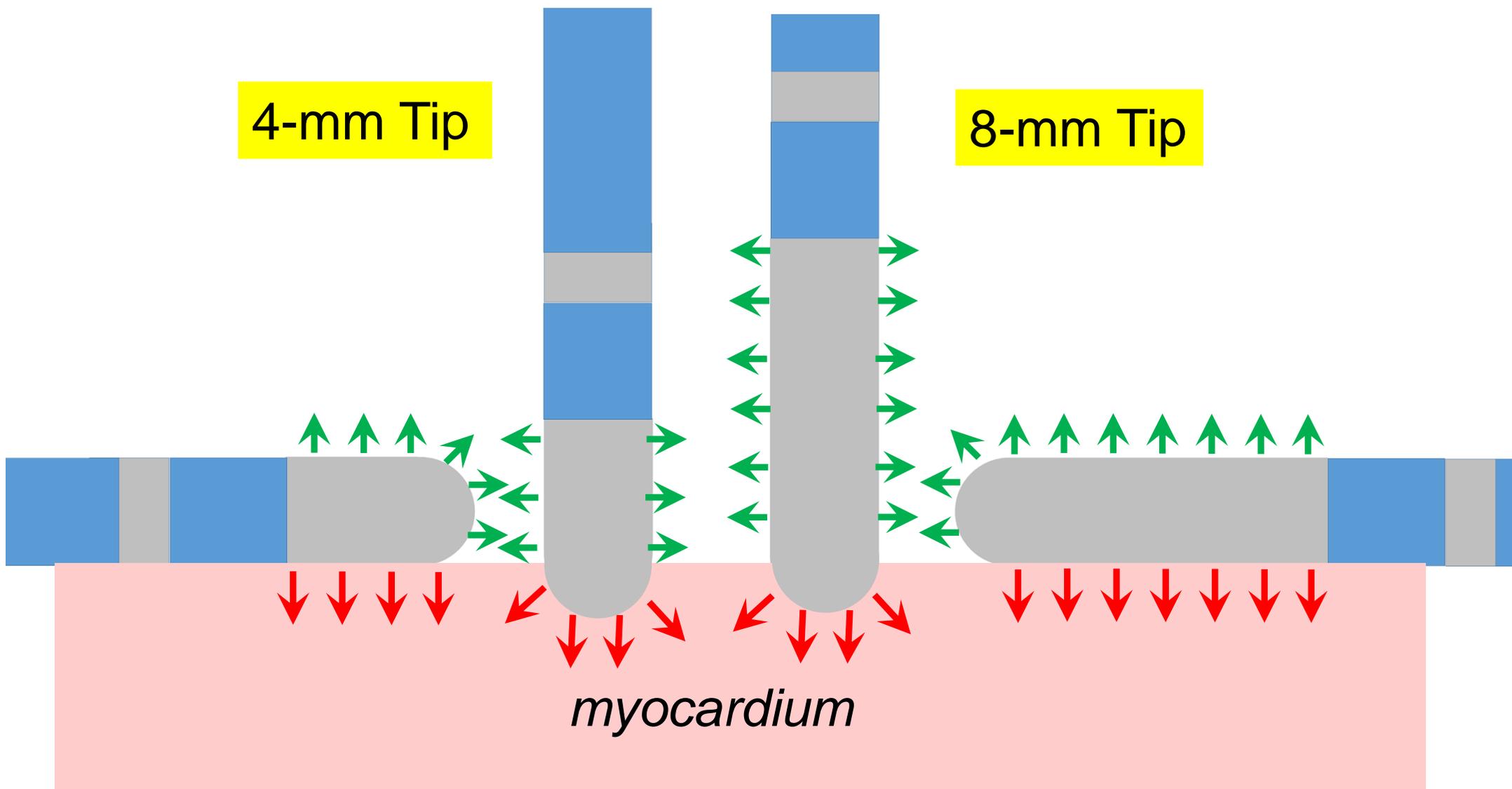


Figure 3.4C.

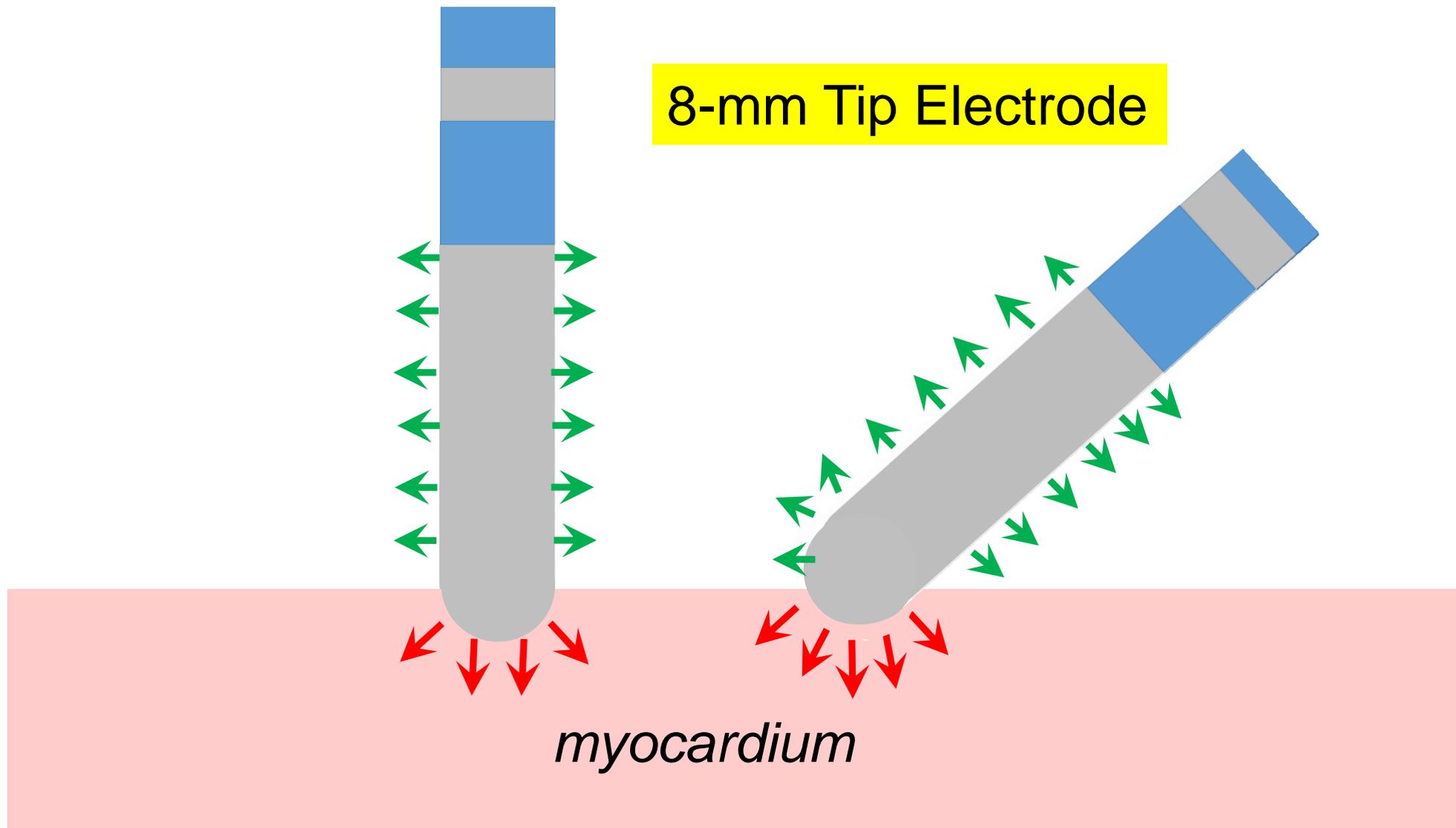


Figure 3.4D.

Jackman-Nakagawa Canine Thigh Muscle Preparation

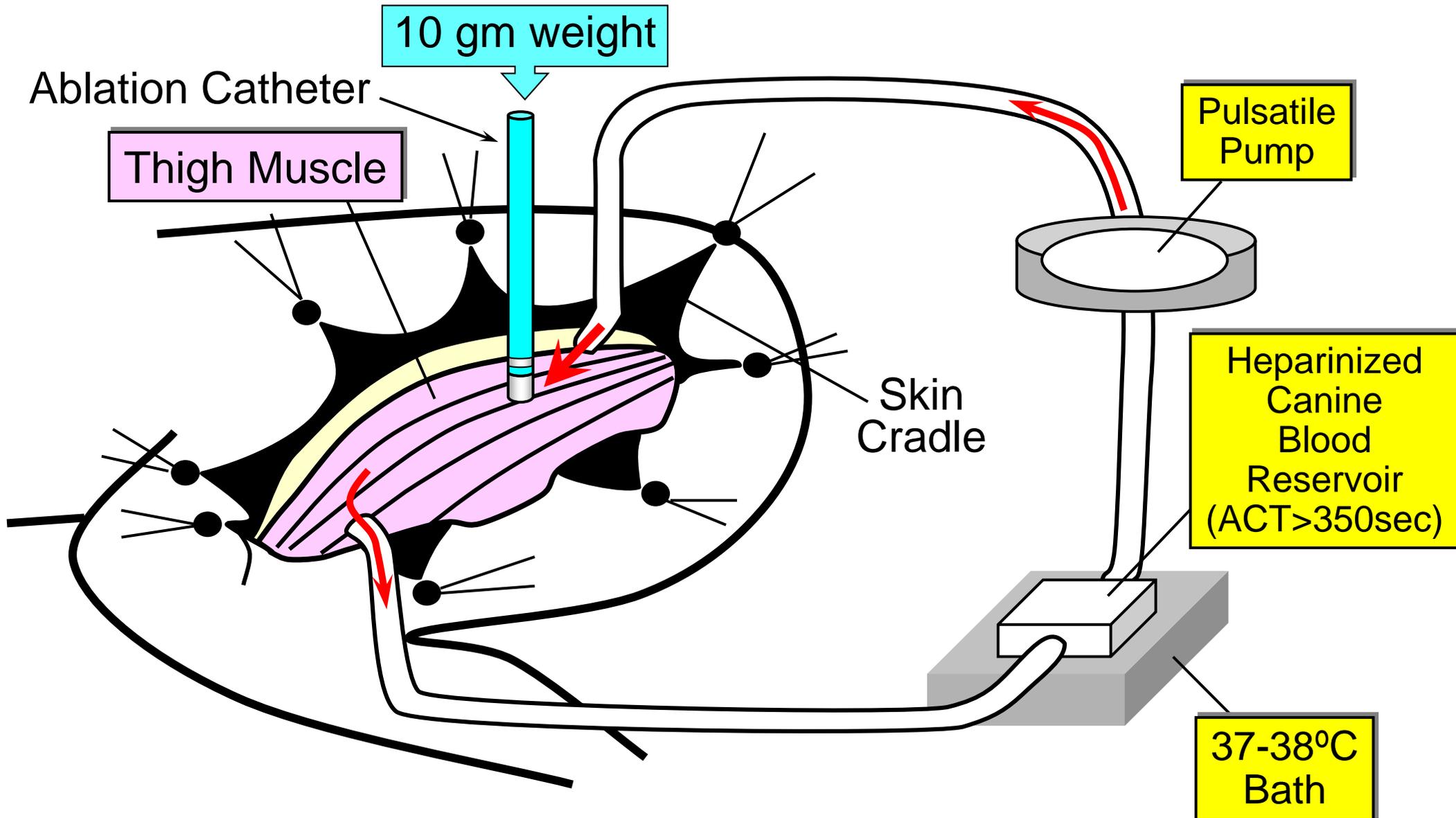


Figure 3.5A.

Courtesy of Drs. Jackman and Nakagawa

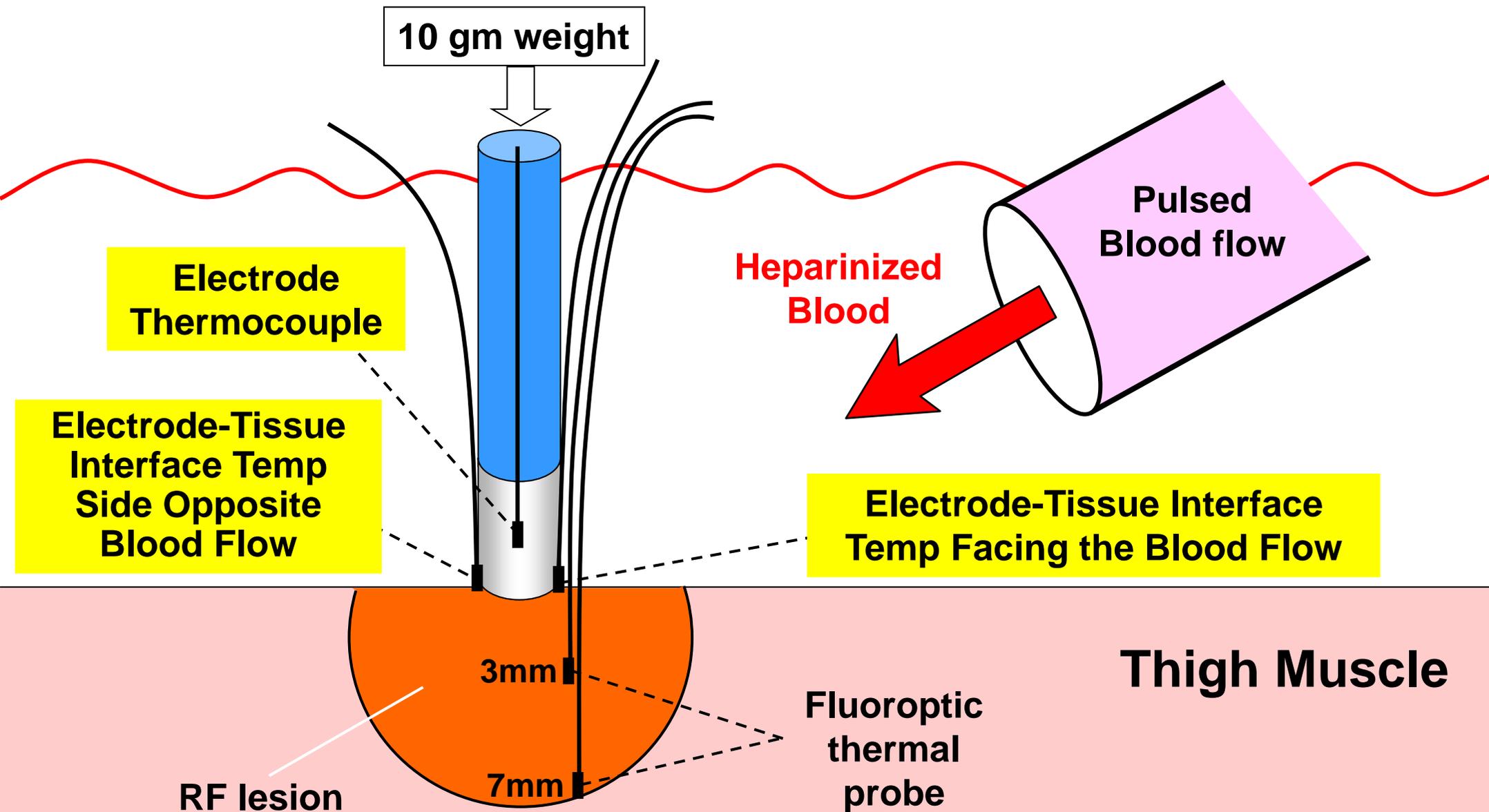


Figure 3.5B.

Courtesy of Drs. Jackman and Nakagawa

**4 mm Electrode,
Electrode
Temperature 75°C**

Without Blood Flow

Impedance

95 ohms 85 ohms

Power

10 watts 4 watts

**Electrode
Temperature**

75 74

80°C
30°C

**Interface Temp
Both sides identical**

**Tissue
Temperature**

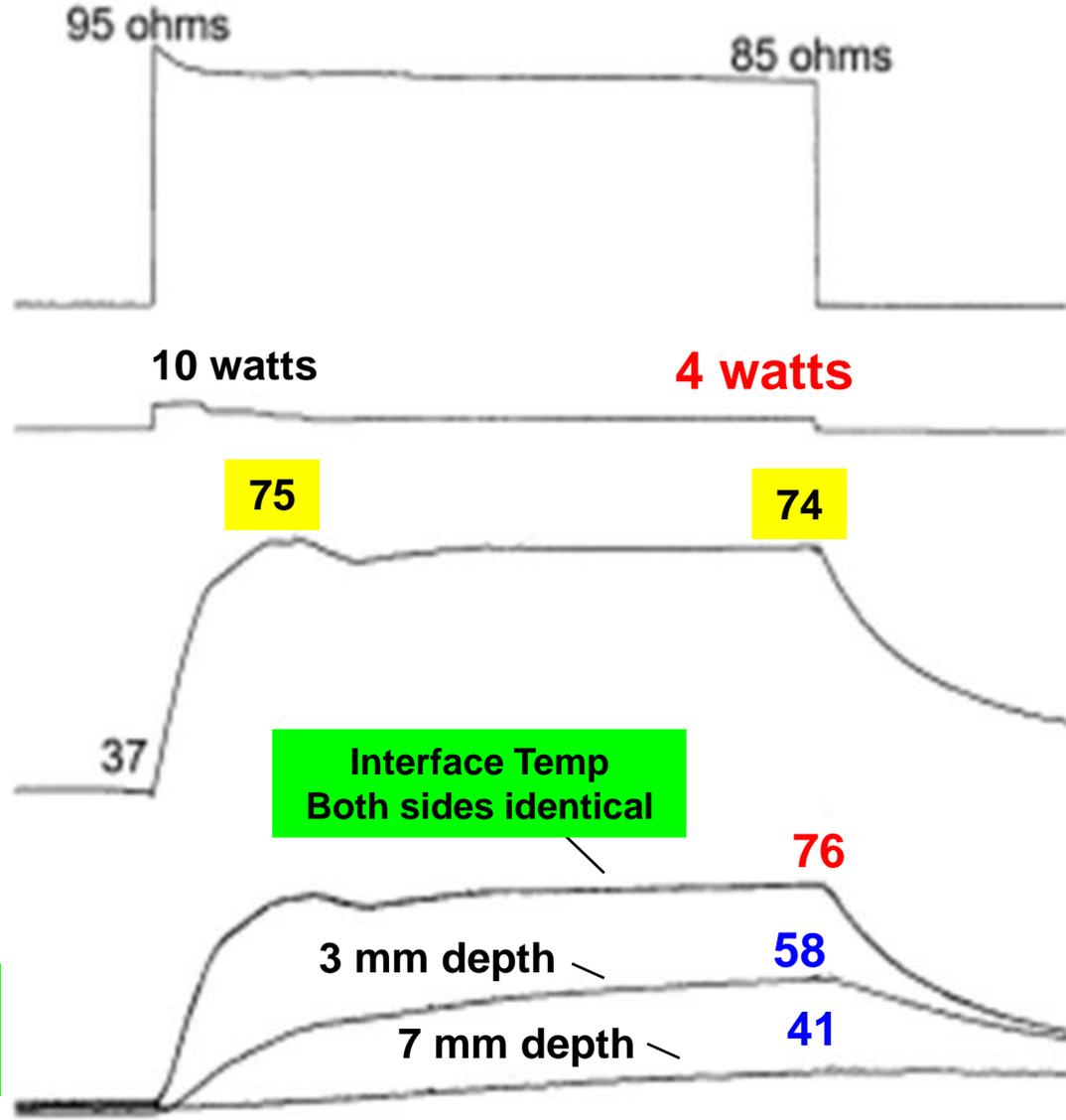
3 mm depth 58

7 mm depth 41

80°C
30°C

60 sec

Figure 3.6A.



**4 mm Electrode,
Electrode
Temperature 75°C**

With Blood Flow (150 ml/min)

Impedance

Power

Electrode
Temperature

Tissue
Temperature

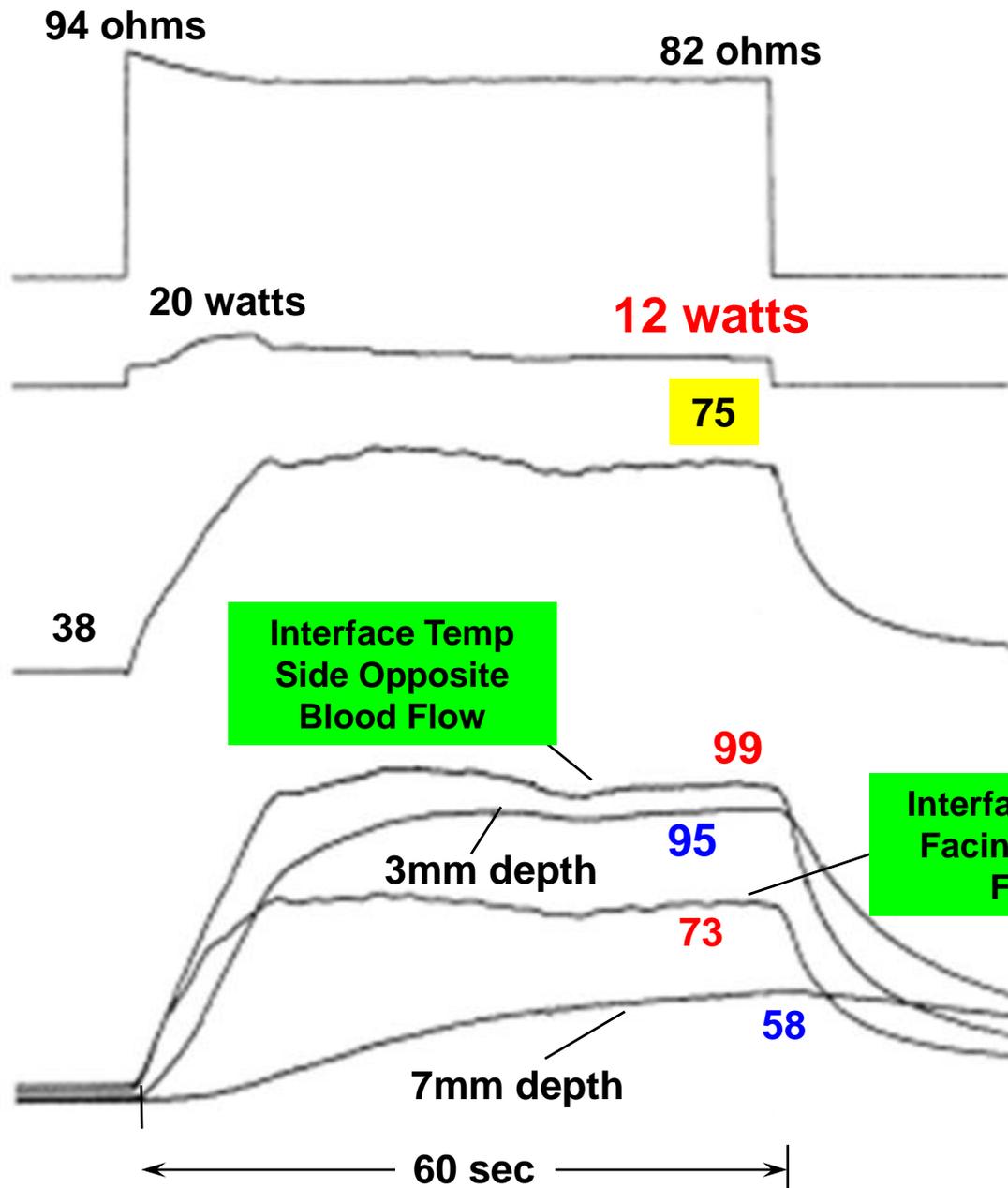
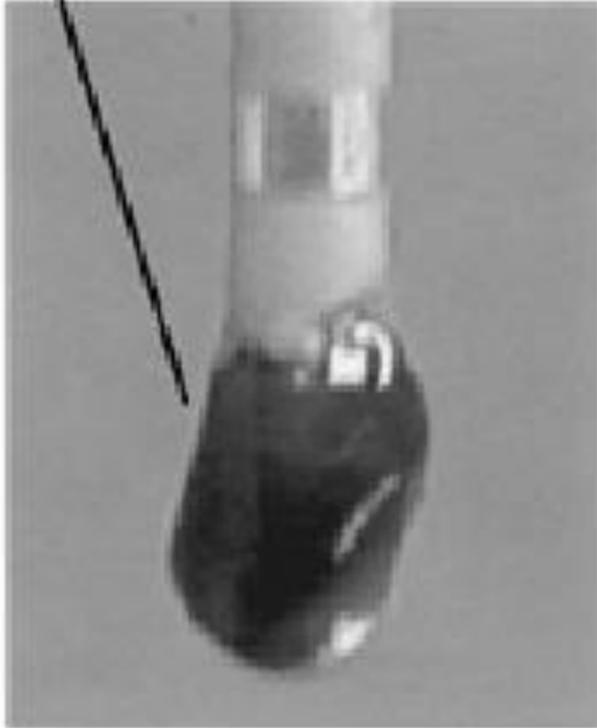


Figure 3.6B.

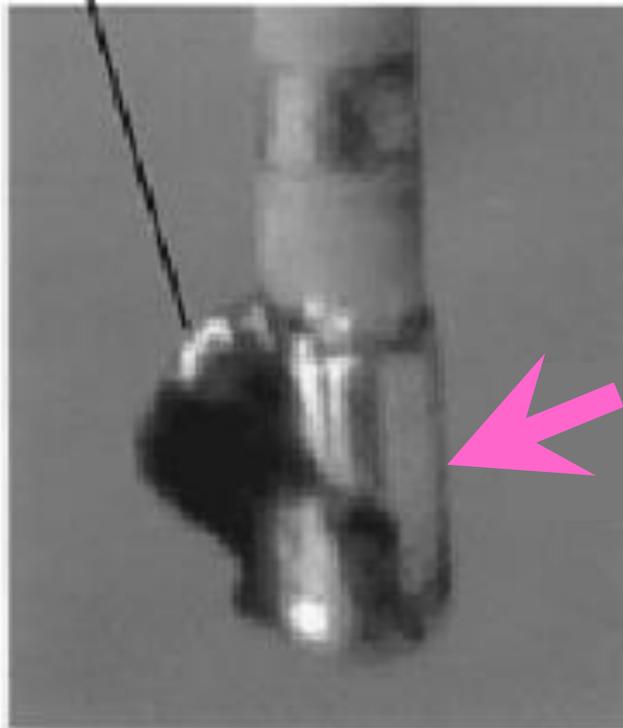
No Blood Flow

Thrombus



With Blood Flow

Thrombus



Thrombus

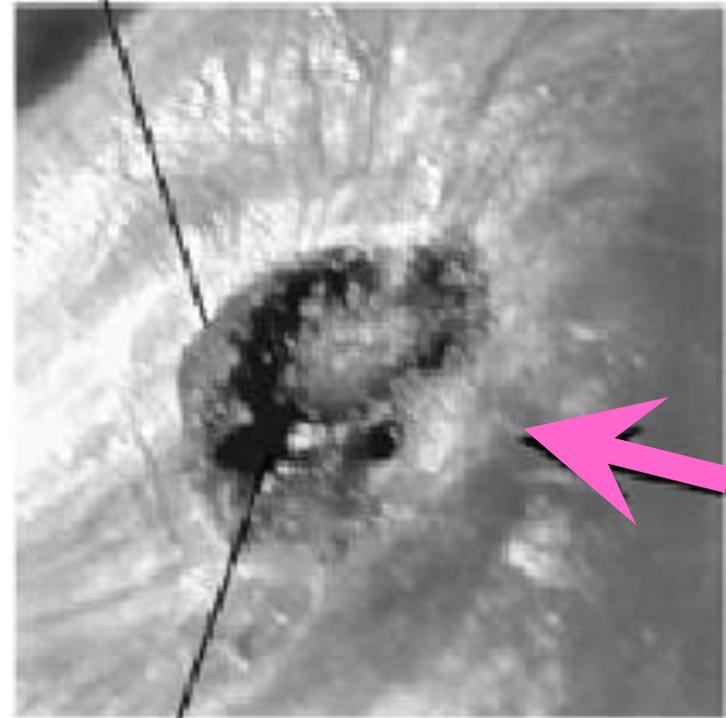


Figure 3.6C.

8 mm Electrode, Electrode Temperature 55°C

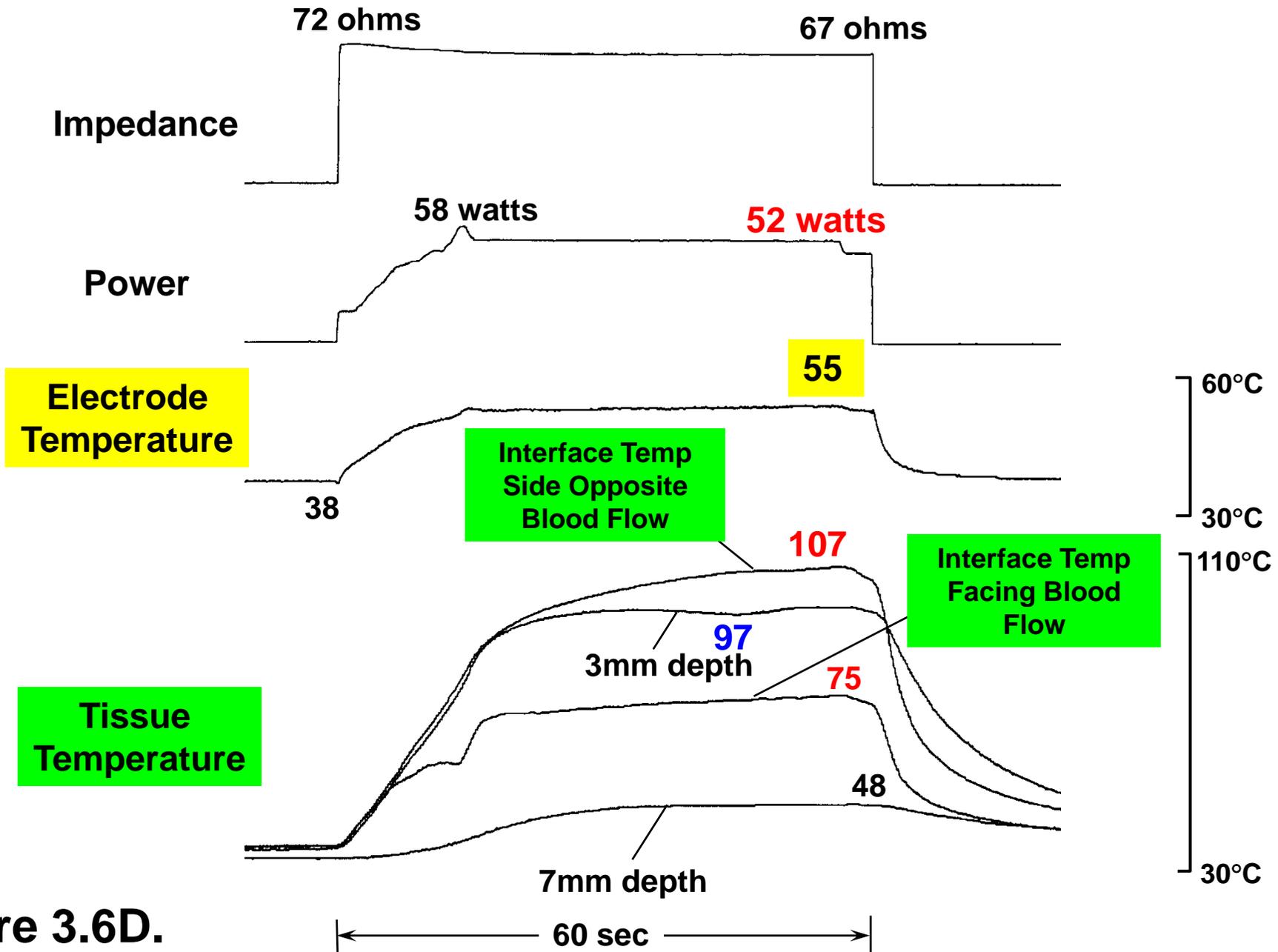


Figure 3.6D.

Highest Electrode-Tissue Interface Temperature (8 mm Electrode)

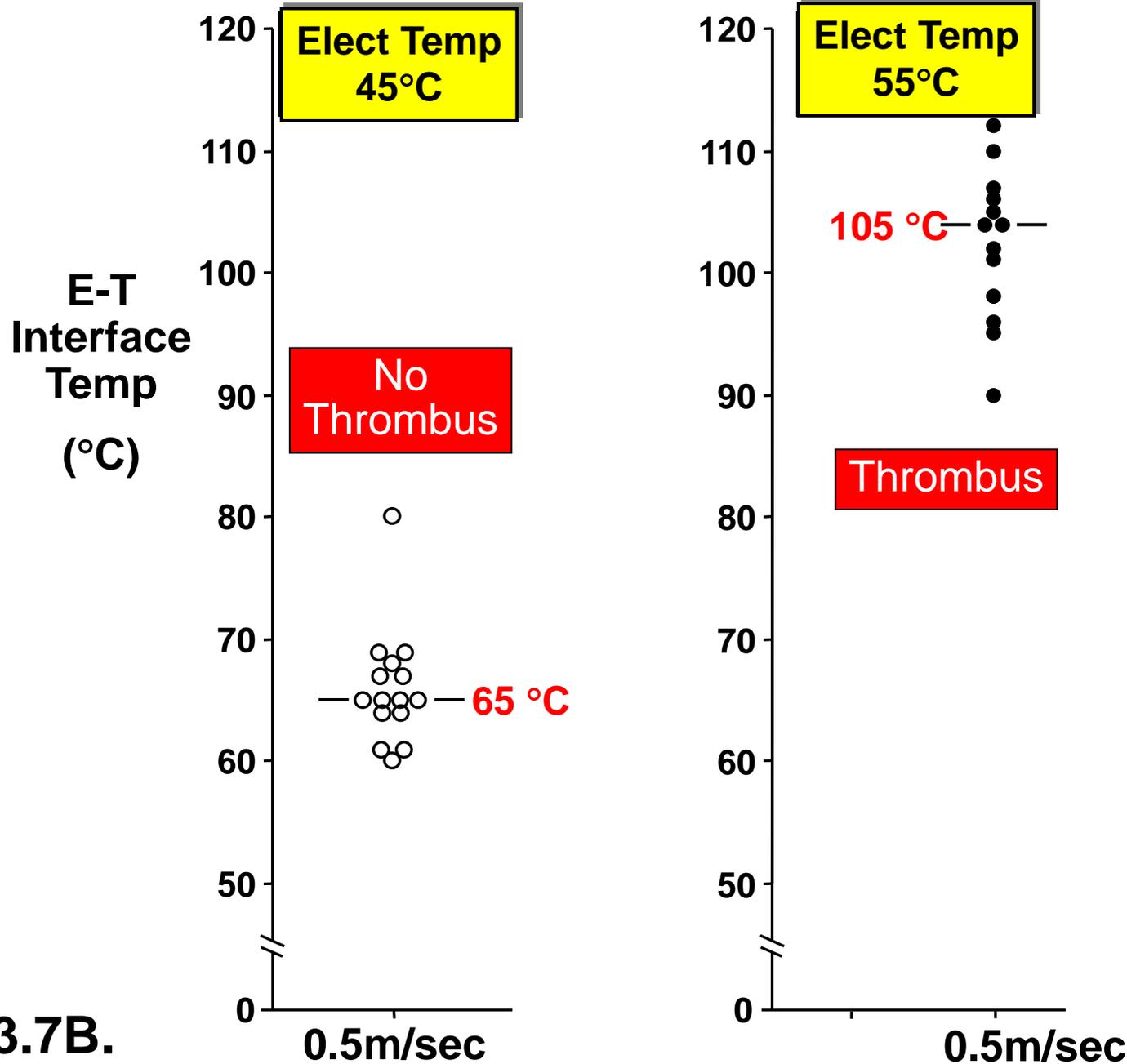


Figure 3.7B.

Saline Irrigation

**Low
Blood Flow
(0.1m/sec)**

**High
Blood Flow
(0.5m/sec)**

**IT
(°C)**

**Thrombus
Threshold
80 °C**

**Thrombus
Threshold
80 °C**

○ No Thrombus, No Pop
△ No Thrombus, Pop

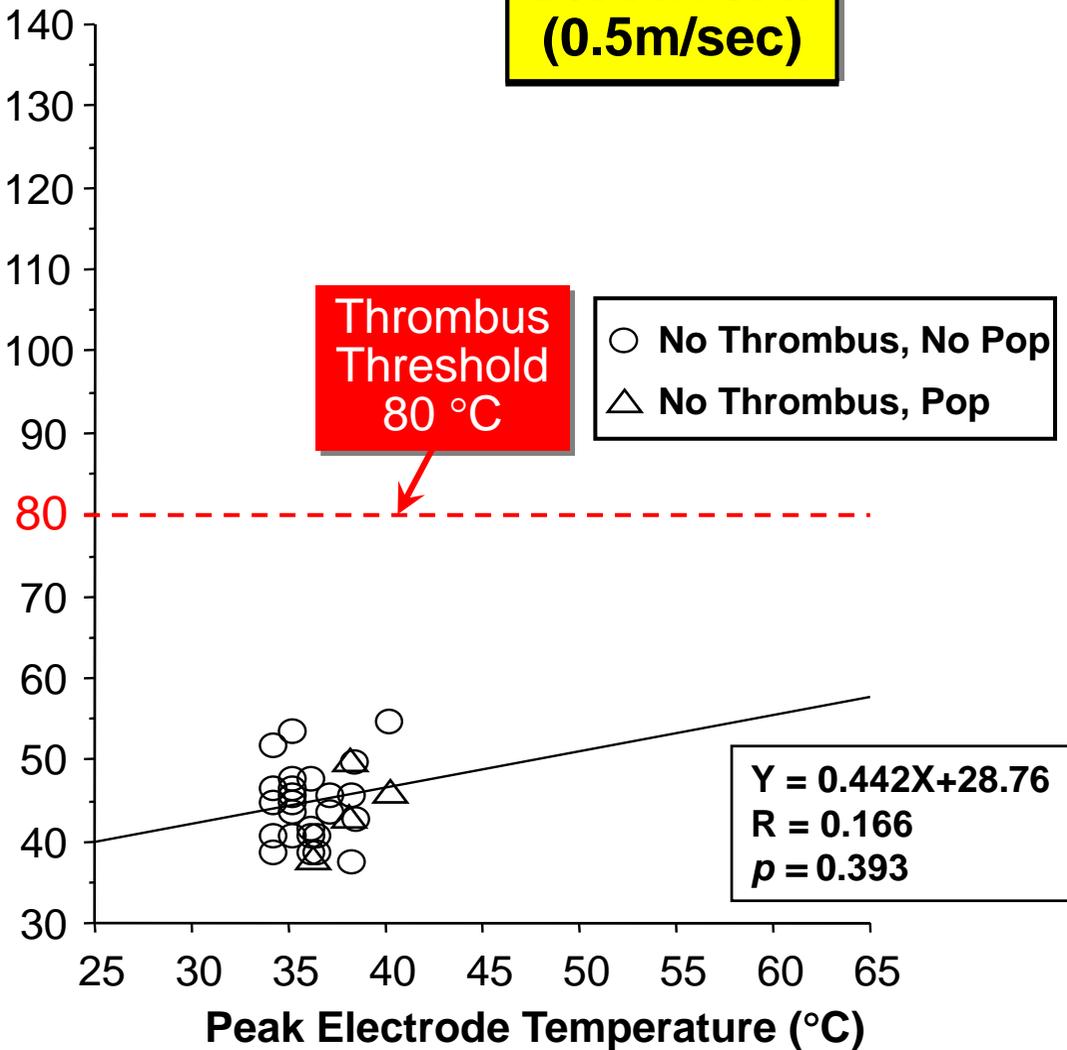
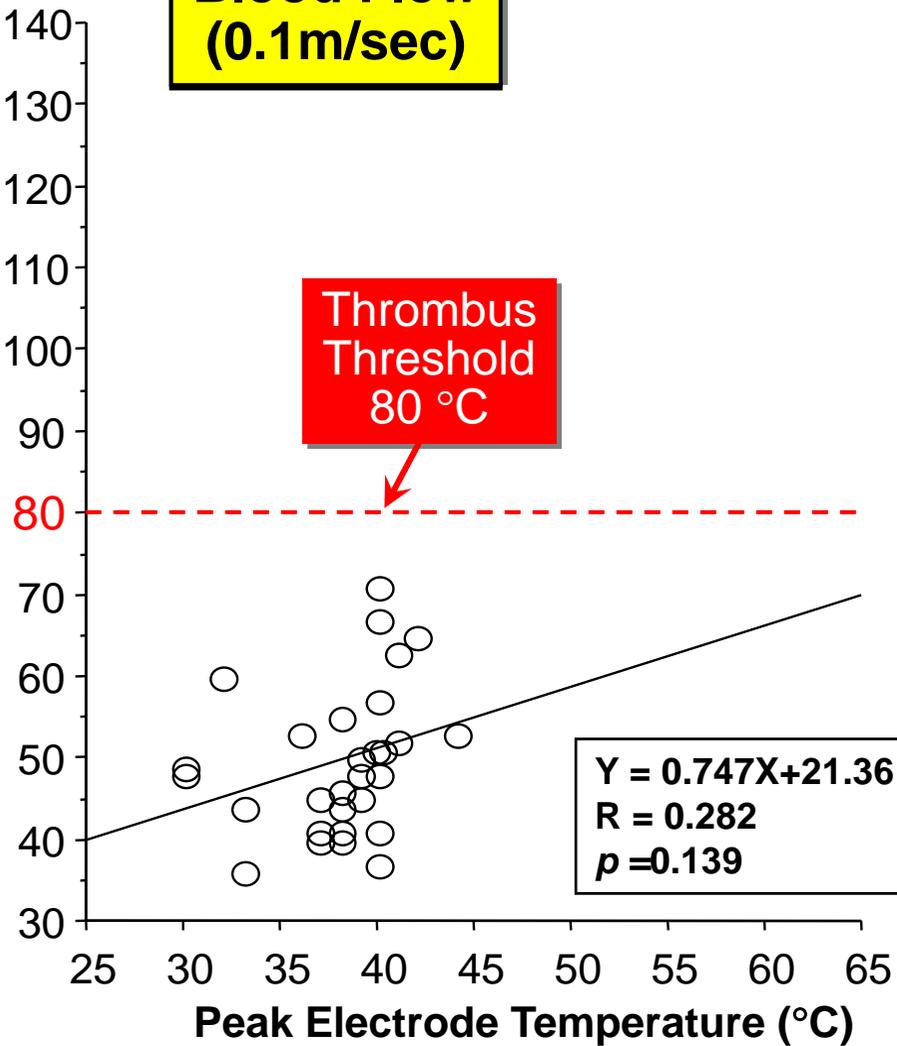


Figure 3.8A.

Courtesy of Drs. Jackman and Nakagawa

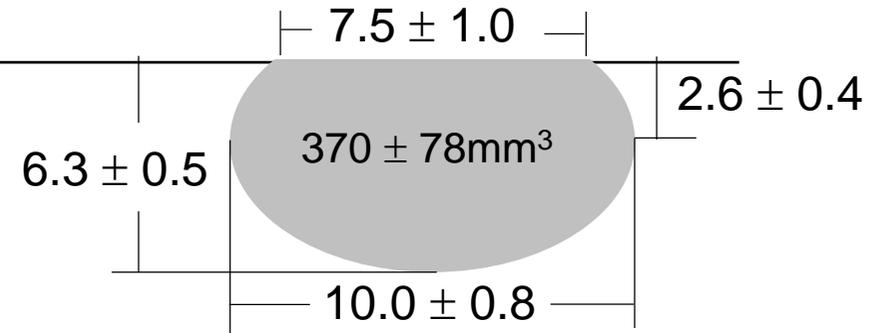
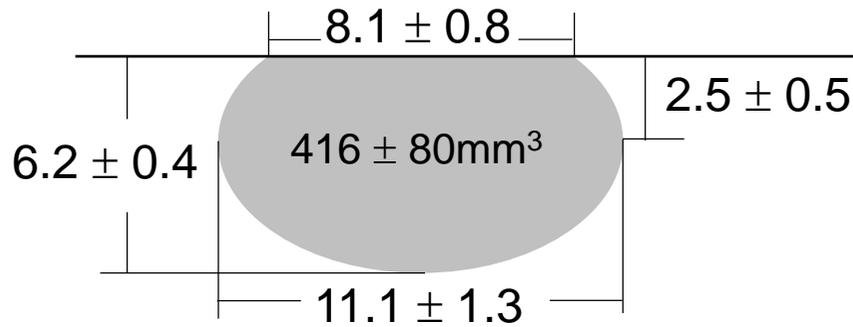
Lesion Dimensions

Low Blood Flow

High Blood Flow

20 W

20 W



30 W

30 W

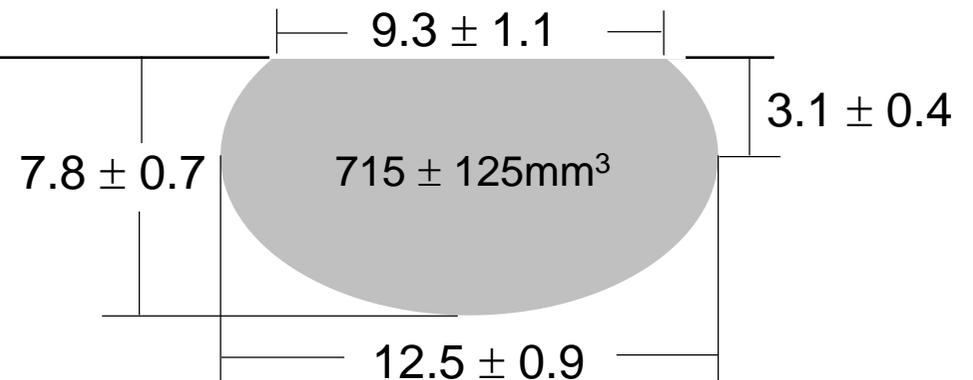
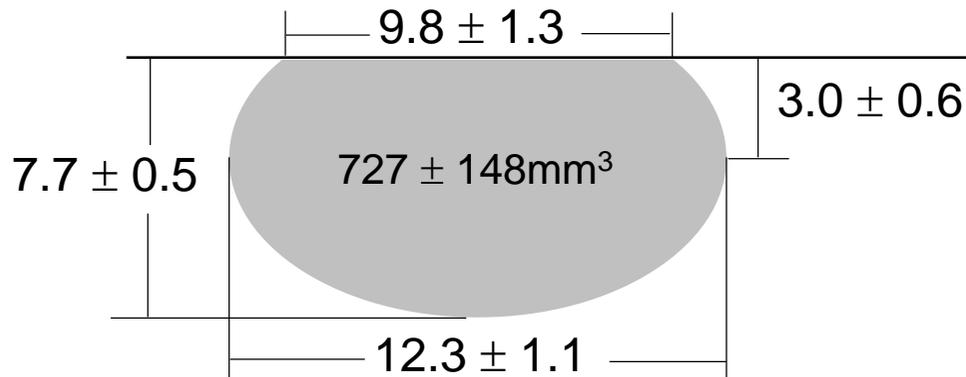
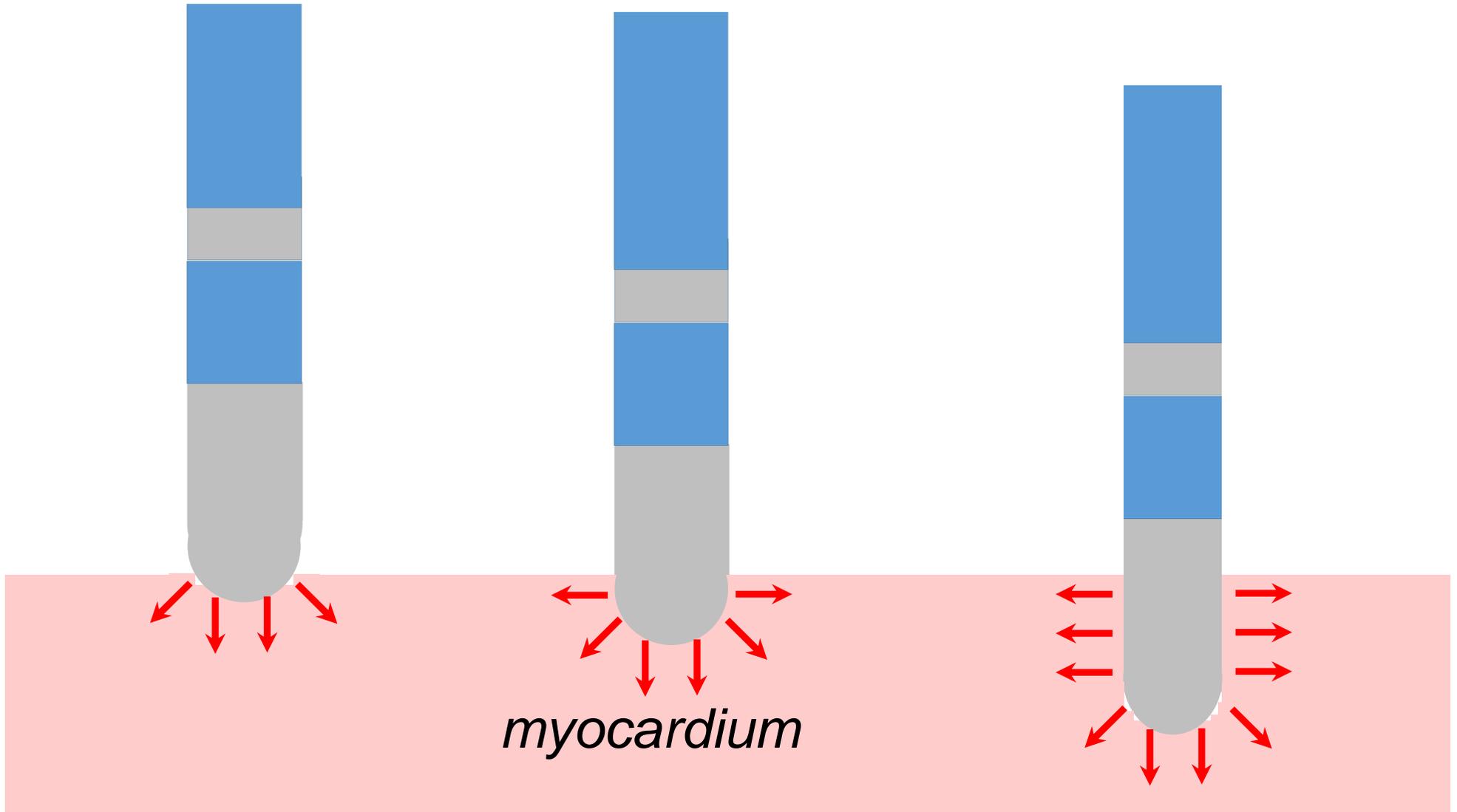


Figure 3.8B.

Low CF

Moderate CF

High CF



myocardium

Figure 3.9A.

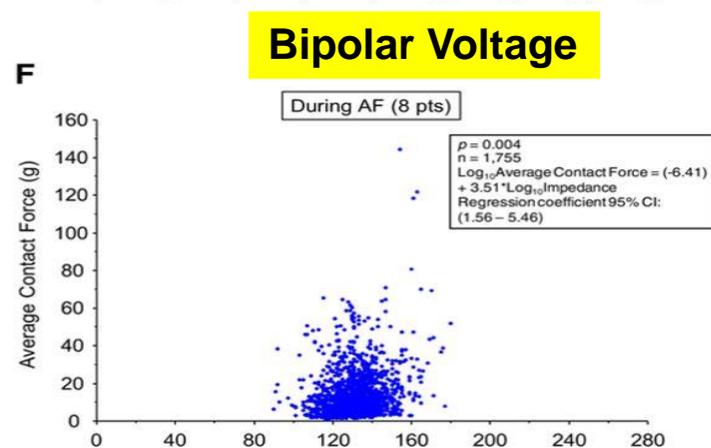
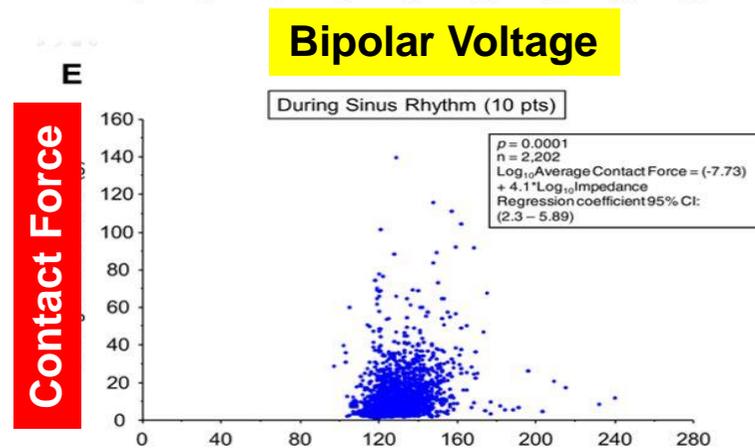
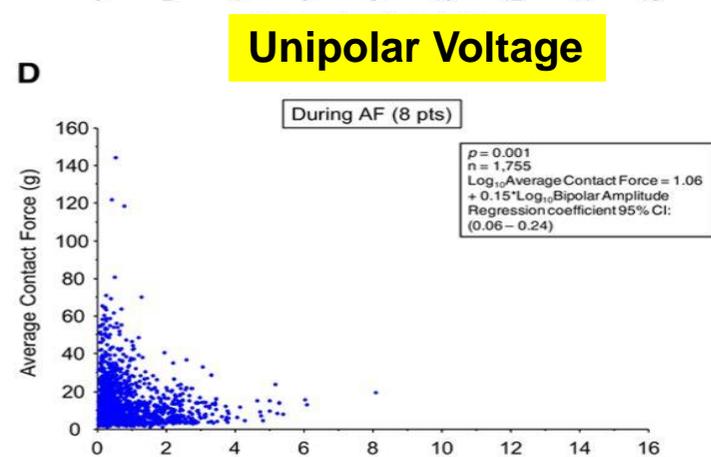
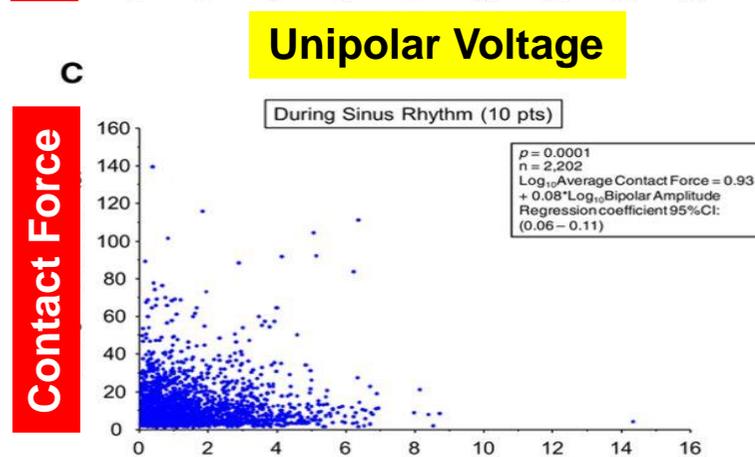
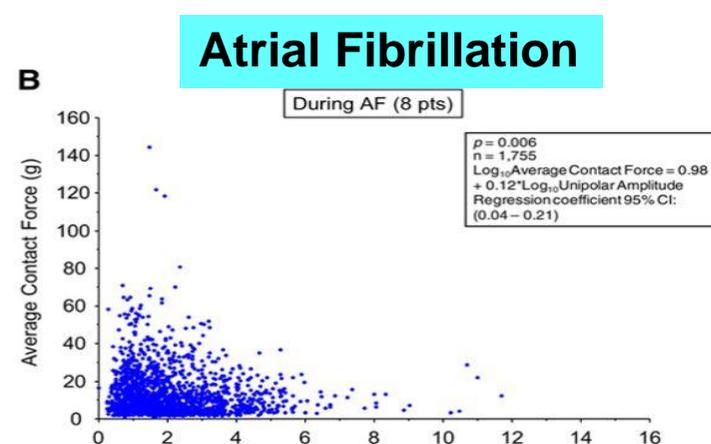
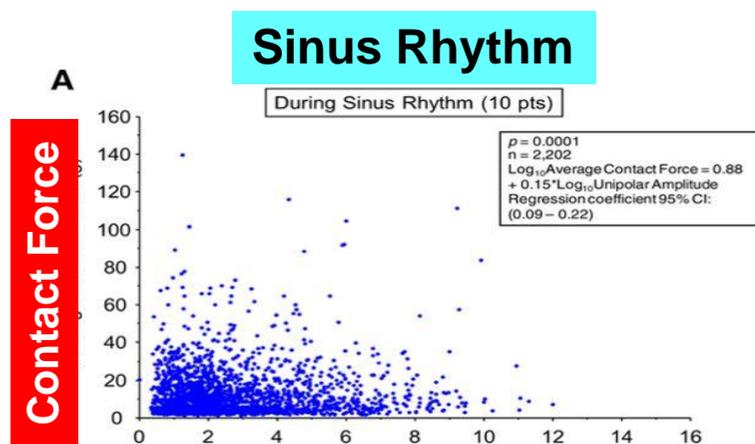


Figure 3.9B.

Impedance

Impedance

Contact Force: 20 g

Contact Force: 5 g

Contact Force: 0 g

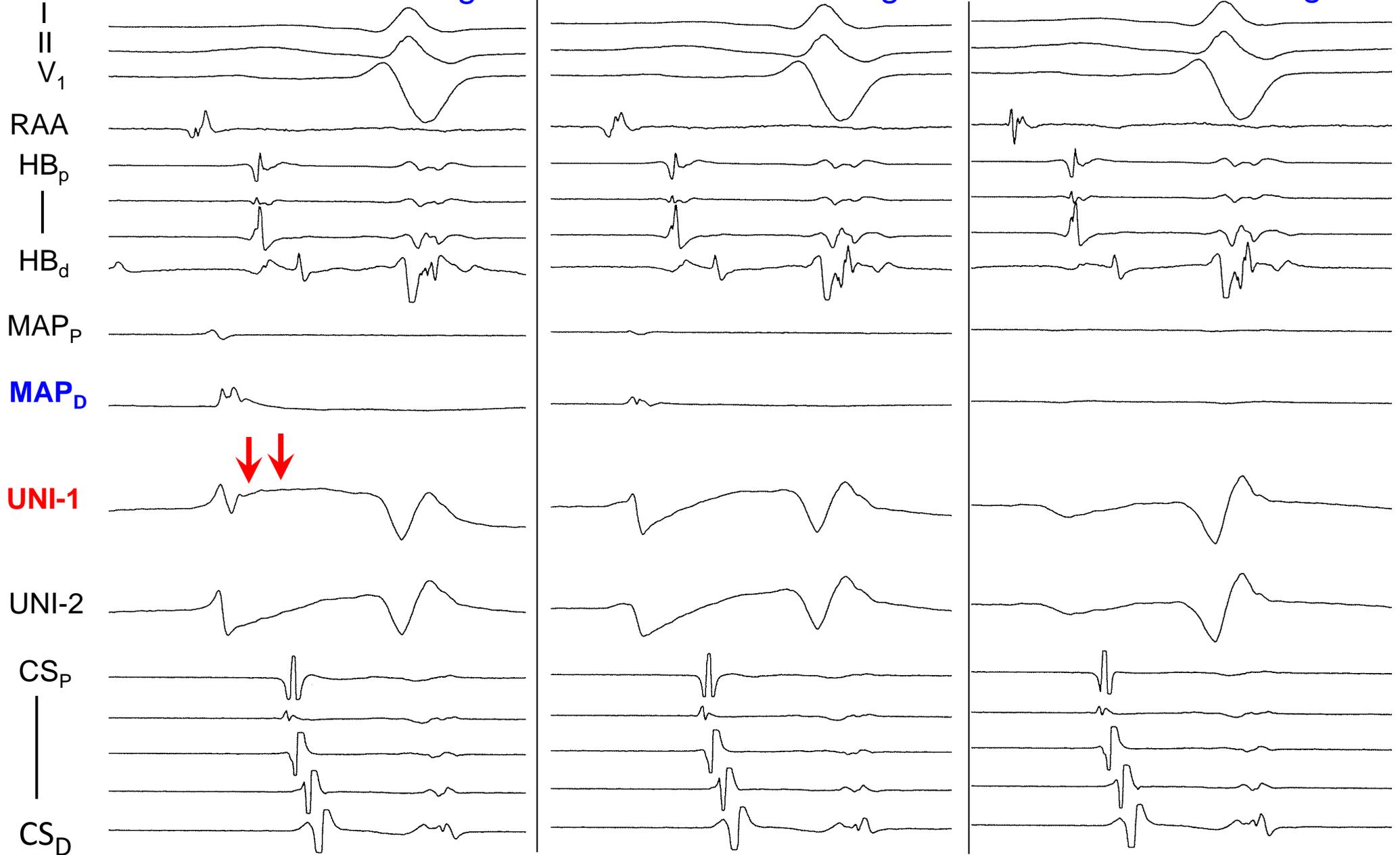


Figure 3.9C.

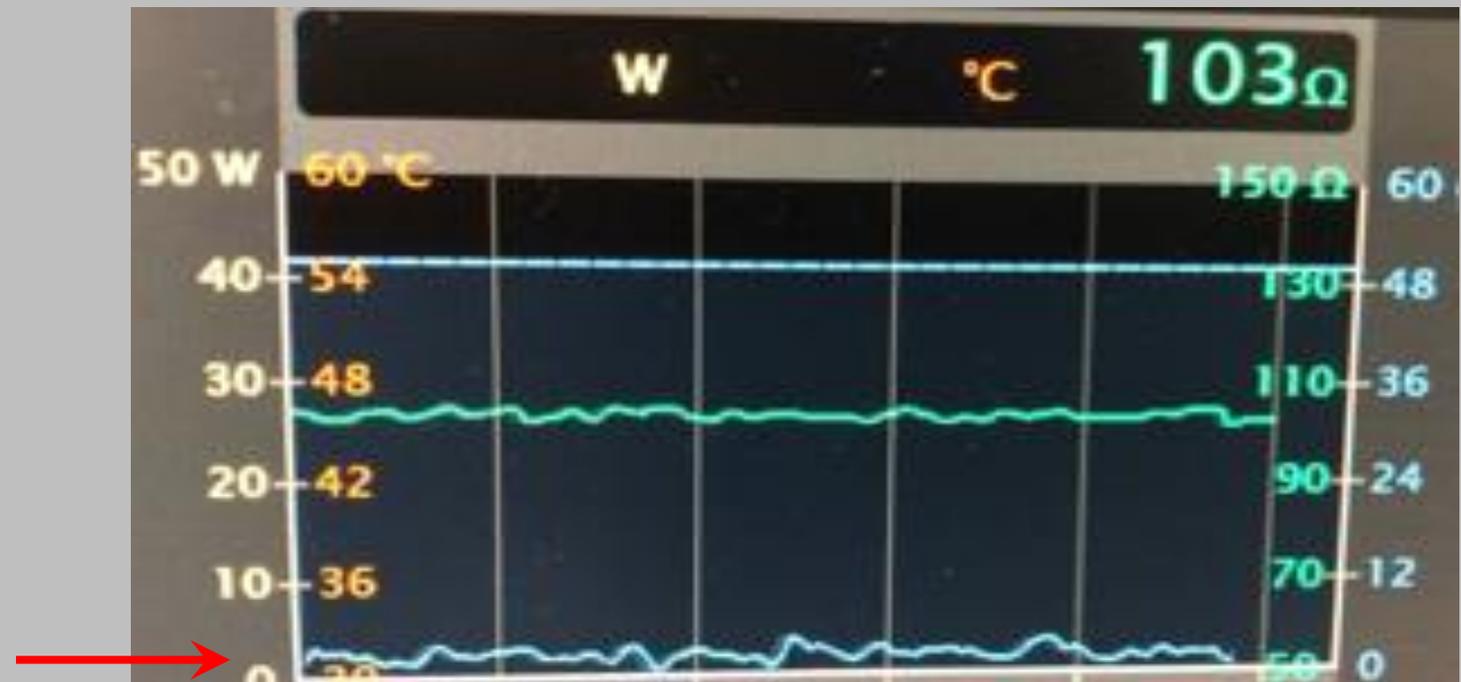


Figure 3.9D.

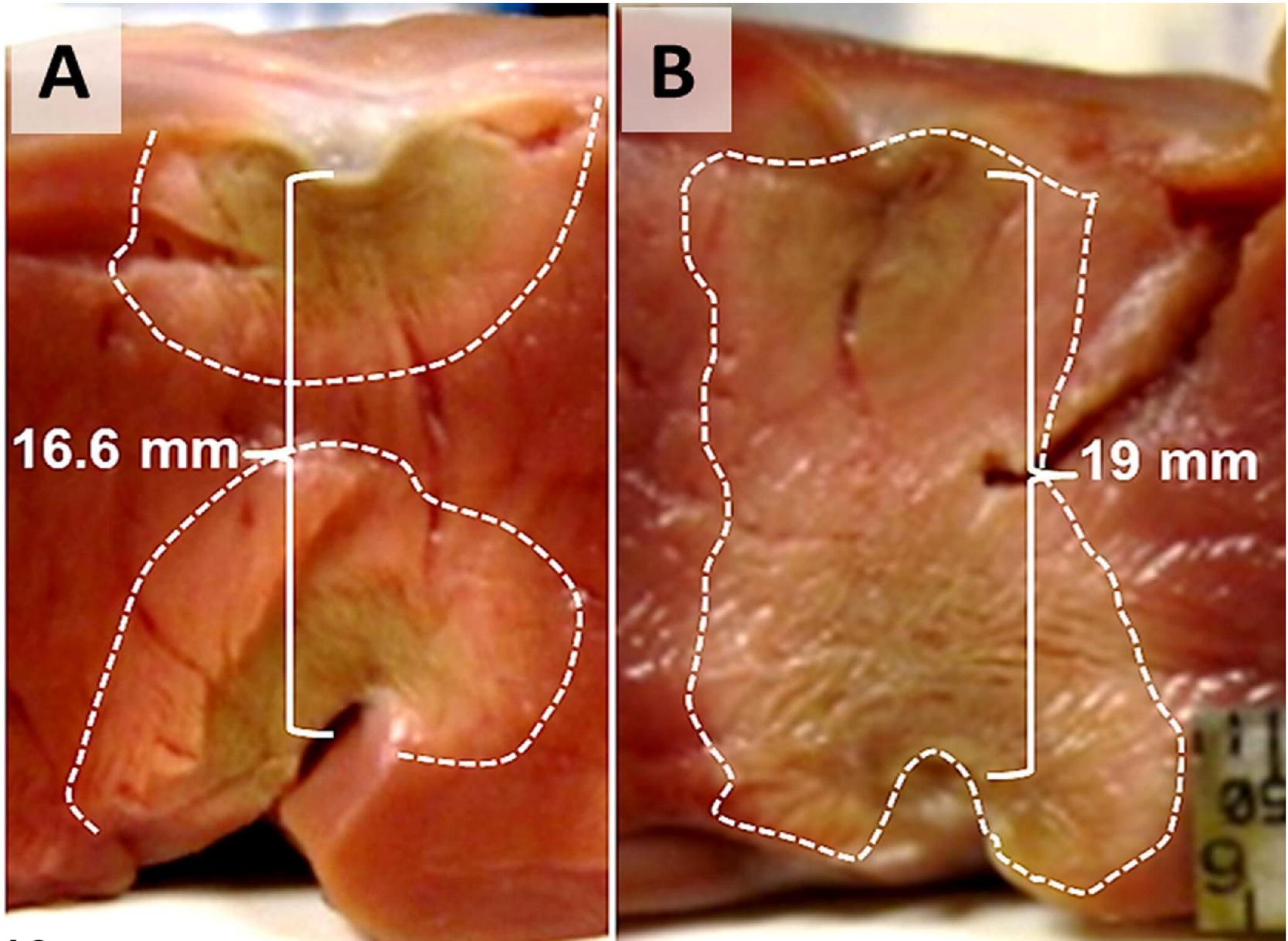


Figure 3.10.

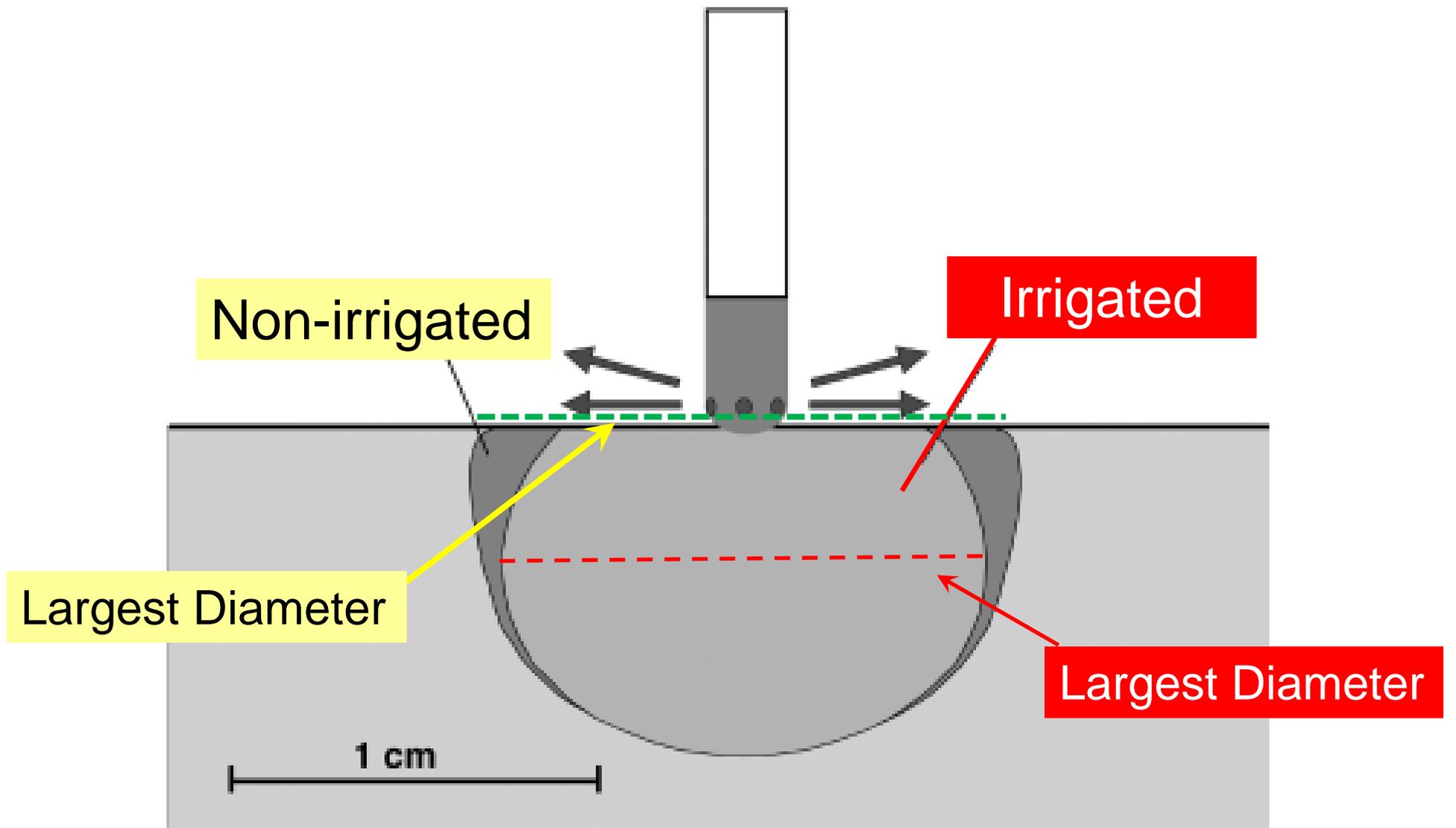
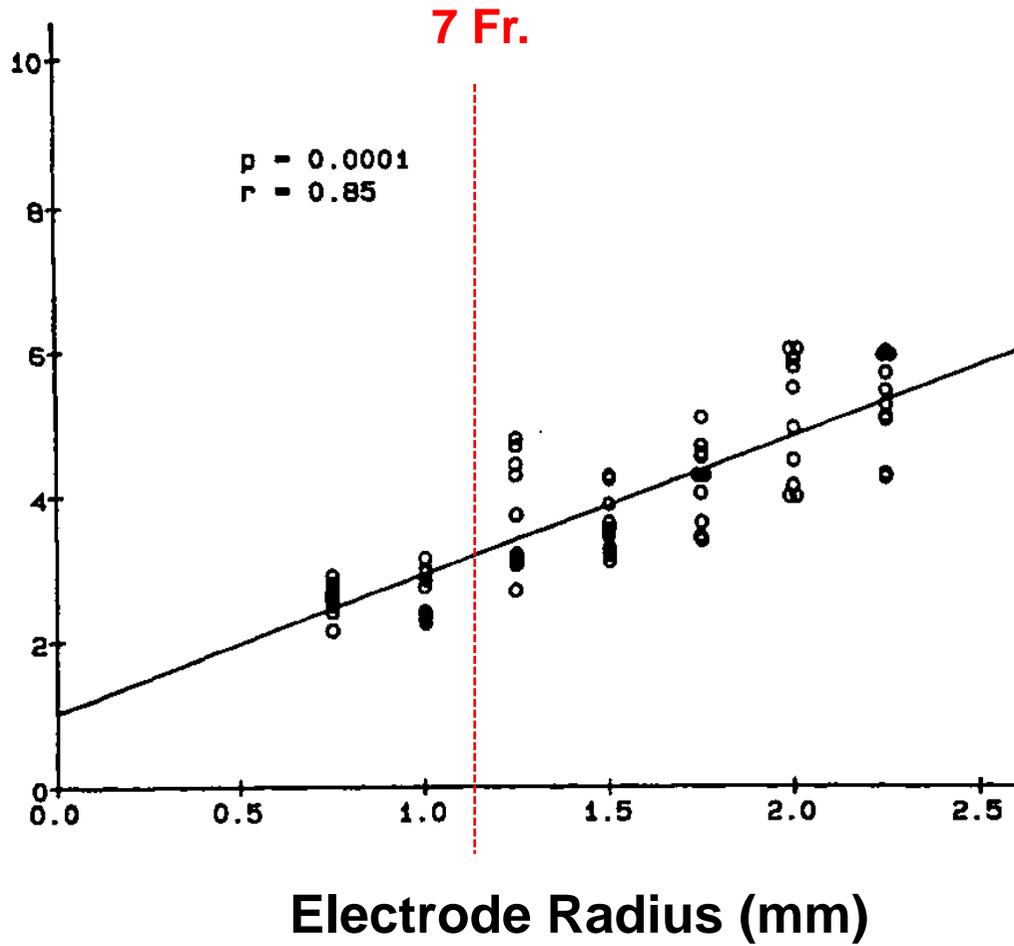


Figure 3.11.

Transverse Lesion Radius (mm)



Transmural Lesion Radius (mm)

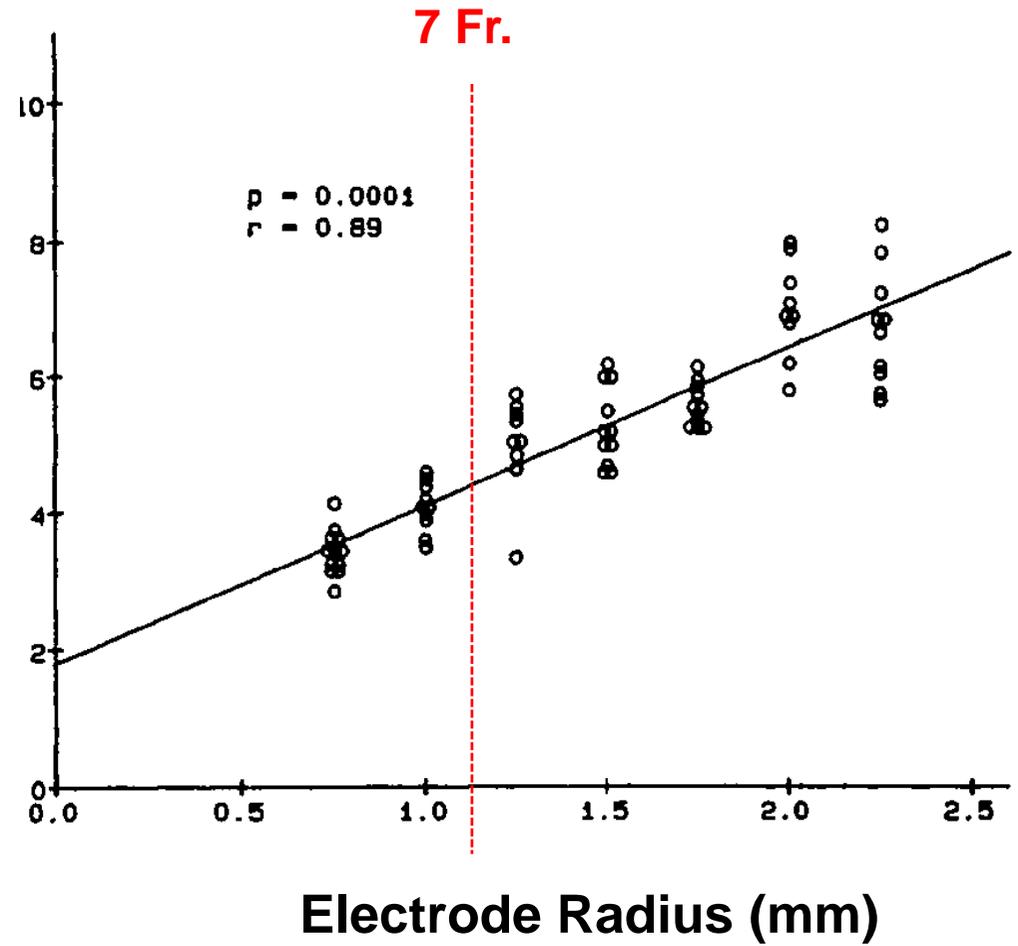
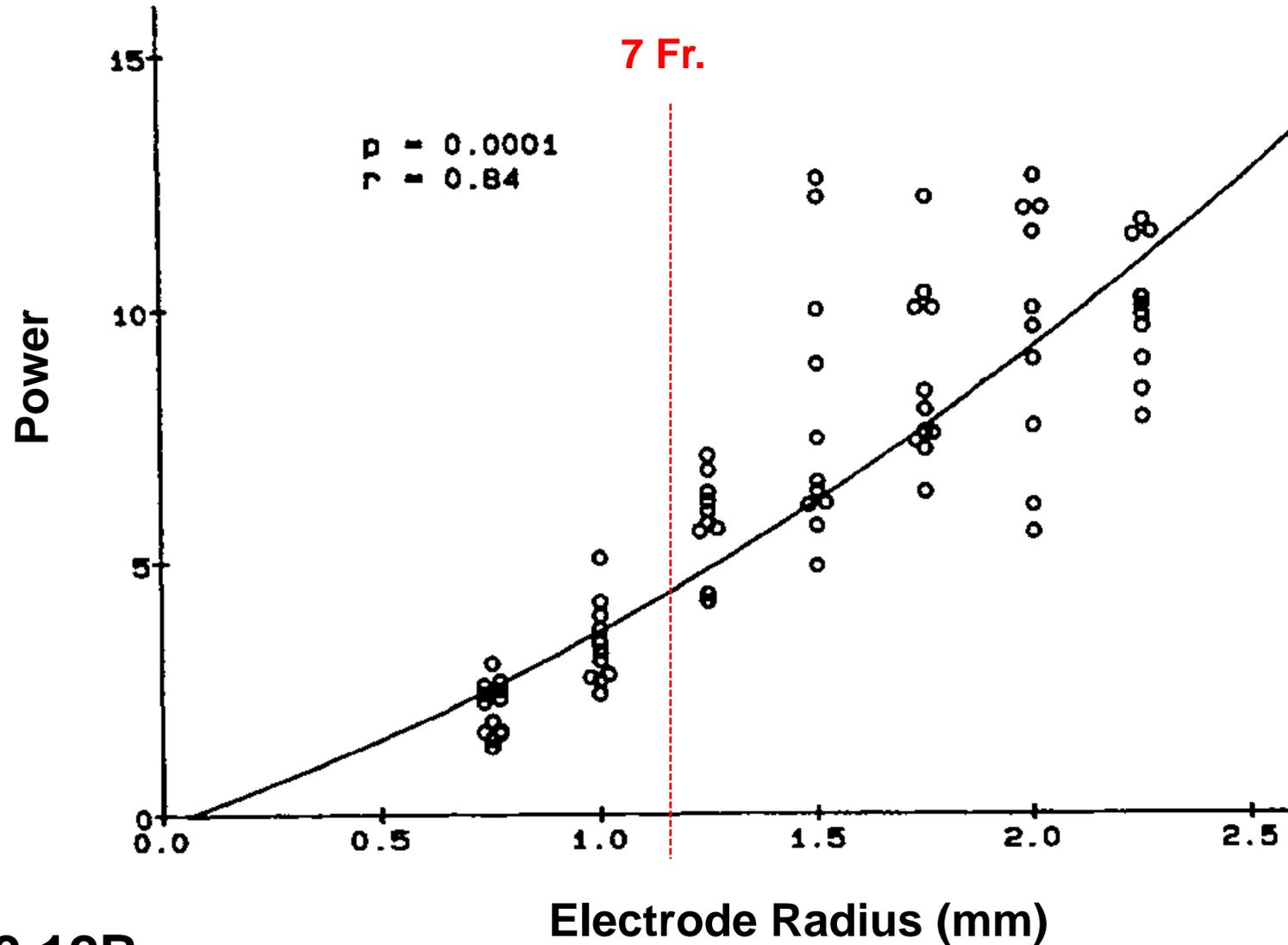


Figure 3.12A.

Power to maintain tissue-electrode interface temperature at 60°C



50 Watts Delivered

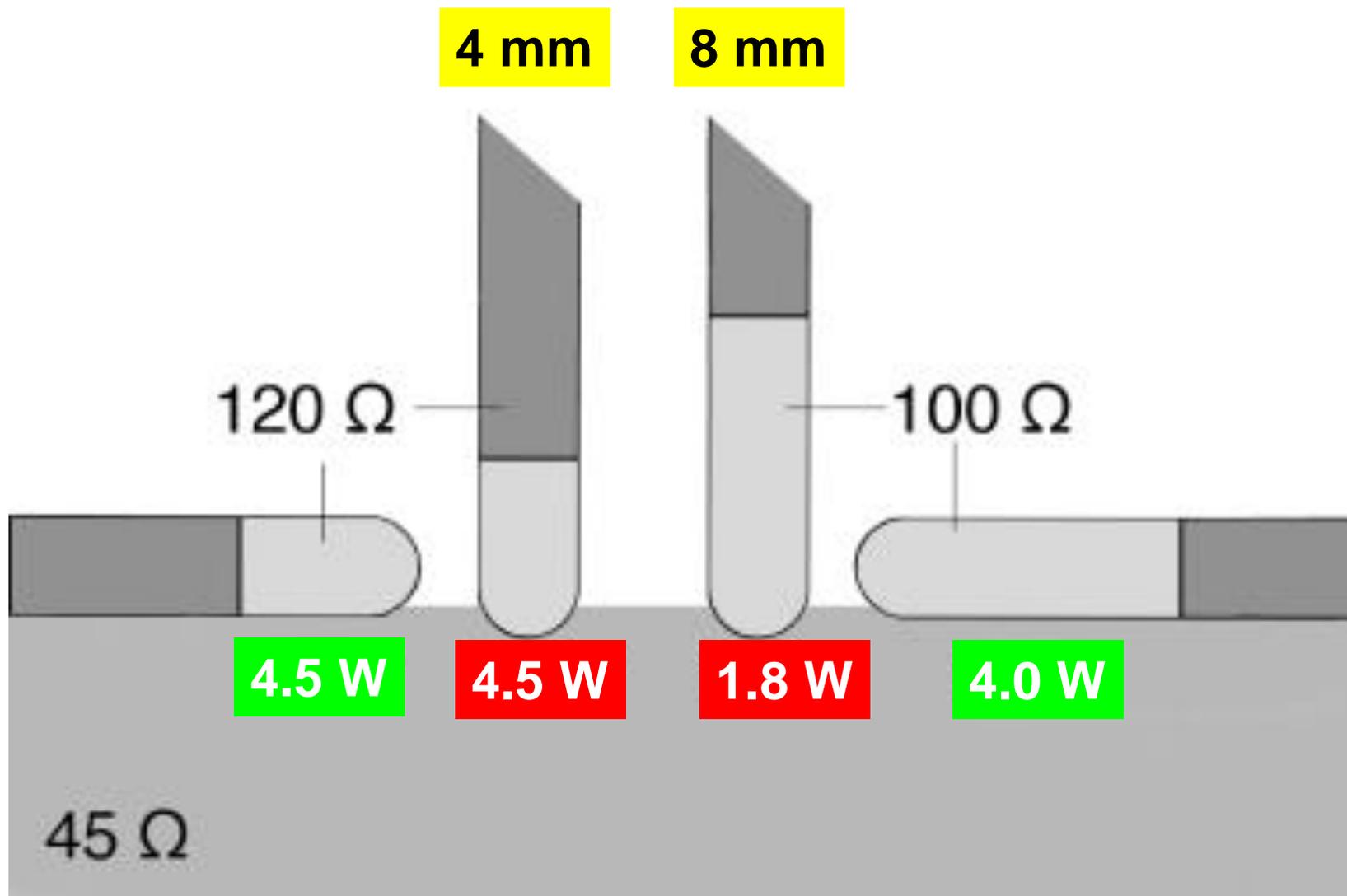


Figure 3.13A.

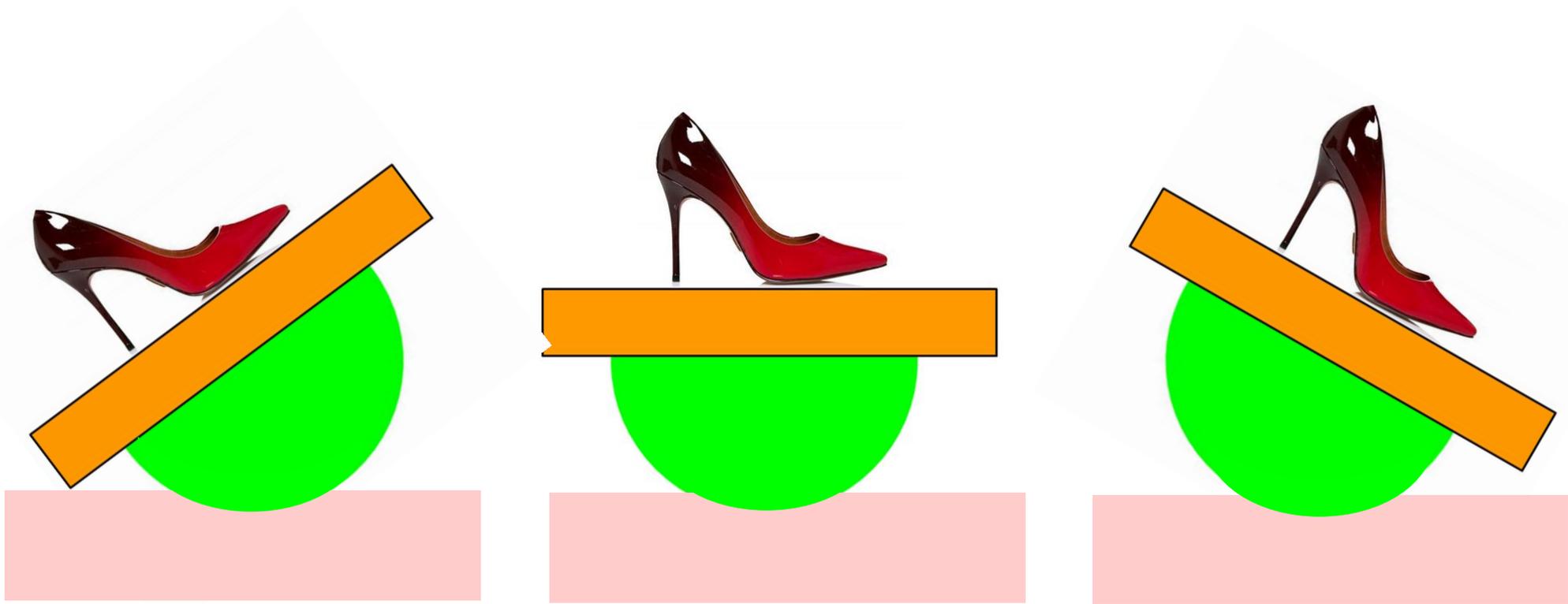
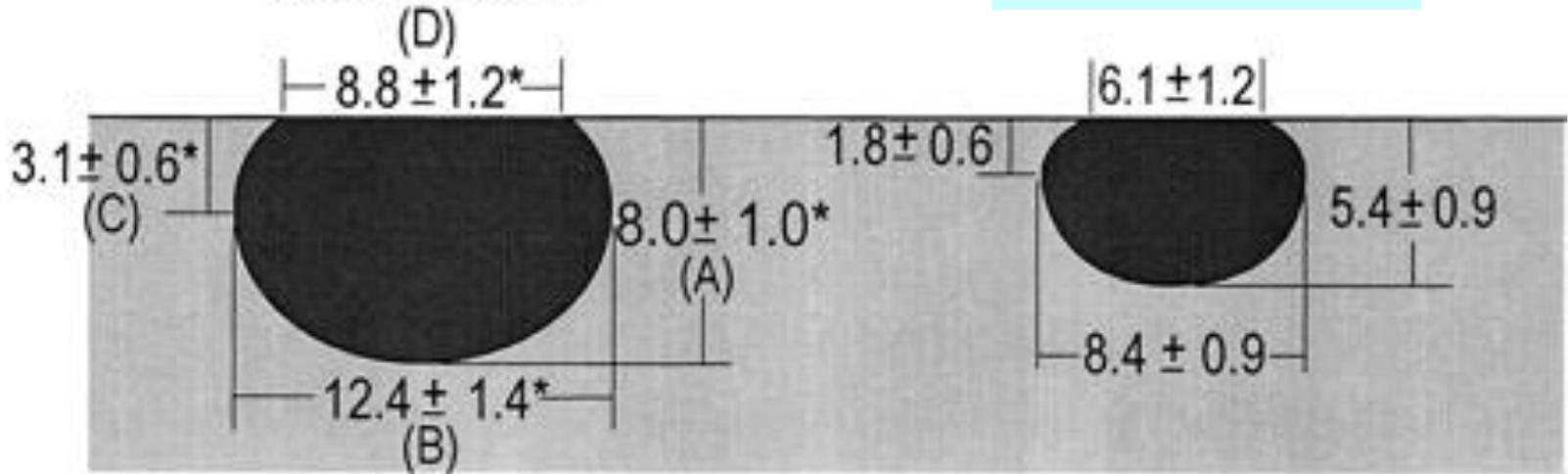


Figure 3.13B

Perpendicular Orientation

2 mm Electrode

5 mm Electrode



Parallel Orientation

2 mm Electrode

5 mm Electrode

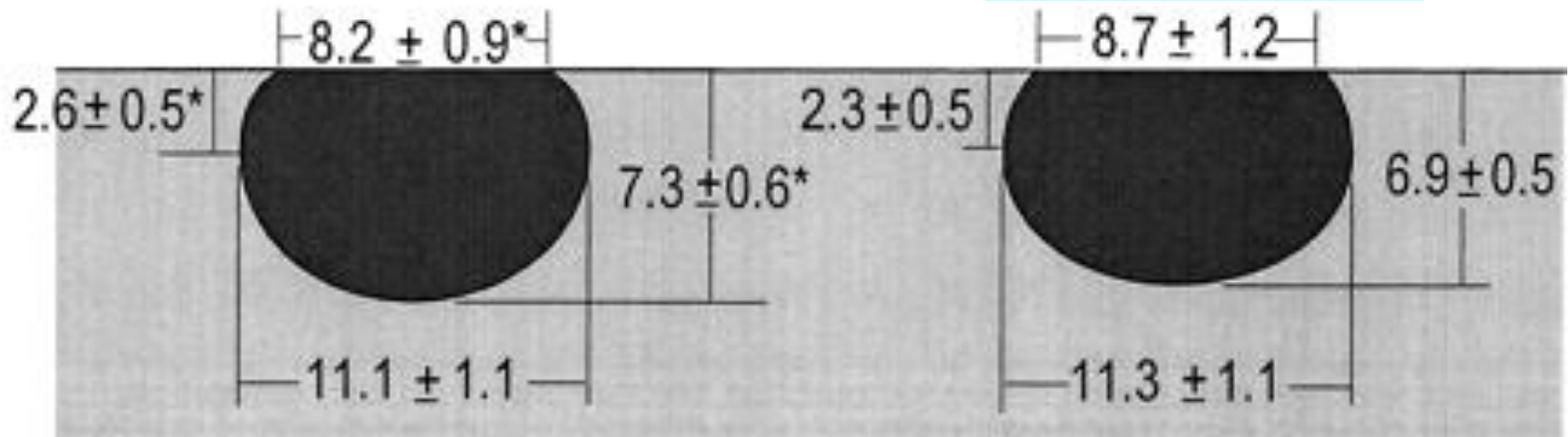


Figure 3.13C.