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THORACIC SURGERY
CARDIOVASCULAR SURGERY
ENDOSCOPY

DIPLOMATE BOARD OF
THORACIC SURGERY

May 26, 1962

Adrian Kantrowitz, M. D.
4802 10th Avenue
Brooklyn 19, New York

Dear Doctor Kantrowitz:

Three weeks ago we implanted one of the G-E Pacemakers which you helped to develop. I want to thank you for the detailed instructions which accompanied your instrument. This makes the procedure much easier than it would be without them.

We had a complication which I have not seen mentioned in the literature and I would appreciate your comments on this. With the electrodes in place high on the left ventricle we loosely approximated the edges of the pericardium and were preparing to close the chest when it was noted that the left diaphragm was contracting each time the heart beat. We then found that the electrodes lay beneath the phrenic nerve which coursed very close to the pulmonary hilum. The pericardium was opened but even with the phrenic pulled back from the electrode it was still stimulated by the electrode touching the pericardium. We hesitated to place a sponge over the electrodes for fear of promoting too much scarring about them and were hesitant to try to reroute the nerve for fear that it might return to contact with the electrodes afte r the chest was closed. We finally crushed the nerve as it entered the diaphragm. This of course controlled the hiccups but I dislike paralyzing the phrenic unnecessarily, particularly in a somewhat obese person as was this woman. So far everything has gone well and we are waiting to see what happens when the nerves has had time to regenerate. This lady had a preoperative rate of 26 to 30 which was not affected by any of the drugs tried by the internists here.

I would appreciate any comment you may offer.

Sincerely

Nelson H. Kraeft

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