straight pen was found to be suitable for this purpose. A copper wire was inserted into the catheter to give it stability. The dye was then fused into the plastic by rotating the catheter rapidly 3 inches above an alcohol flame. Too much heat distorted or burned the catheter. As soon as the plastic assumed a shiny character the dye was fused and the heat was discontinued. The catheter was then placed in hot water to re-establish the desired curve, followed by immersion in cold water to fix it in that position. The circular ring was bright green in color, readily visible during intubation, and resistant to boiling, alcohol, or ether.

The various distances, from the tip of the catheter to the circular mark, which were found to be satisfactory are listed in table 1.

When the circular mark was placed at the level of the vocal cords, endobronchial intubation or accidental extubation did not occur.

This technic is a valuable safeguard where residents are undergoing instruction. If at any time there is doubt as to how far the catheter has been inserted, it is a simple matter to check the distance by looking for the circular mark. If it is not visible, the catheter may be withdrawn until the green ring comes into view, without the fear of extubating the patient. Similar markings may be placed on the other end of the catheter to act as a guide for distance of insertion during blind intubation.

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TABLE 1

Size of Catheter (Magill)	Distance from Tip of Catheter to Mark, cm.
0	2
1	2.5
2	3
3	3.5
4	4
5	4.5
6	5
7	5.5
8	6
9	6.5
10	7

CORRESPONDENCE

To the Editor:

In the May issue of ANESTHESIOLOGY there appears a communication by Dr. B. L. Steinberg in which he comments upon a technic for induction and intubation with sodium pentothal for thoracic surgery as described by Dr. Alexander and myself in the January 1947 issue of ANESTHESIOLOGY. He states that he tried this method on about a dozen patients and has given it up because he encountered cardiac irregularities immediately following intubation.

Dr. Steinberg is to be congratulated for this clinical observation. However, because of the small quantity of cases observed ("about a dozen"), it can only give him a clinical impression. It happens that some of my associates and I have just completed electrocardiographic studies during endotracheal intubation using most of the common anesthetic agents in 103 patients. This report, which will be sent in for publication soon, will demonstrate many interesting features. One fact, concerning the present issue, is that endotracheal intubation during intravenous pentothal sodium is *not* attended by more cardiac irregularities than when any other agent is employed.

I should like to reiterate that the technic of induction and intubation described in the article referred was that used for thoracic surgery in an army hospital over-

seas. It is not necessarily the one which Dr. Alexander and I prefer. Its only advantage is the speed with which patients can be prepared for surgical intervention (and time was an essential element from D-Day to past VE-Day when the number of wounded in the chest seemed to grow daily in geometric proportions). Several modifications have been recommended. The use of curare in combination with sodium pentothal is certainly advantageous to secure jaw relaxation which is ofttimes insufficient with pentothal alone. Procaine intravenously can prevent cardiac arrhythmias; its administration prior to intubation is now advocated. More about this will be presented later.

An important factor to be stressed is the insufficiency of our cardiac evaluation by mere pulse palpation and arterial blood pressure determinations. This is strikingly demonstrated when one employs one of instantaneous recording electrocardiographic devices during anesthesia. It seems to me that the modern anesthesiologist should learn to use and to interpret this valuable means of appraising cardiac activity.

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