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A Double-lumen Right Atrial Catheter for Open Heart Surgery

To the Editor:—Monitoring of right atrial pressure (RAP) using a central venous catheter (CVC) is desirable in patients undergoing open heart surgery. The need to use a CVC simultaneously for pressure monitoring and drug or fluid infusion frequently arises. Since the insertion of a second CVC can be time-consuming and carries with it increased risks,¹⁻⁵ we developed a double-lumen catheter that by itself will allow continuous pressure monitoring with simultaneous administration of drug infusion or blood sampling.

A tapered, radiopaque 7F double-lumen catheter was developed that is 20 cm long with a 5-cm proximal port.* The distal lumen may be used for blood sampling or for drug infusion while the smaller proximal lumen may be used for pressure monitoring. The catheter is inserted by Seldinger technique, using a standard 0.035-inch guide wire inserted through the larger distal lumen. The catheter serves as its own dilator and no sheath introducer system is necessary for its insertion. Both lumens are filled with a heparinized saline solution in order to prevent clotting.

The catheter has been employed without complications in ten patients undergoing open heart surgery. The right internal jugular vein has been used in all instances. We have been able to monitor RAP accurately and continuously without interference even during

blood sampling or drug infusion. It is felt that this method is reliable, convenient, and useful when RAP monitoring and simultaneous drug infusion or blood sampling are required.

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Thiobarbiturates Induce Arrhythmias in Dogs

To the Editor:—We would like to comment on the recent paper by Smith and Dresel¹ in which they describe the possible origin of epinephrine-induced arrhythmias in halothane-anesthetized dogs. It is well-recognized that thiobarbiturates often induce ventricular bigeminy which is coupled to the preceding sinus beat in dogs.² While it has been reported that thiamylal so-

dium causes these arrhythmias more frequently than thiopental sodium, both agents will cause ventricular bigeminy when given at anesthetic dosage.² The clinical importance of this arrhythmia in the dog is in dispute at the present time. The cause has been related to increased arterial pressure, the concentration, and dose of thiobarbiturate administered.^{2,3} In addition, the