
Intra-Aortic Balloon Counterpulsation: How to Do It

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INTRA-AORTIC BALLOON COUNTERPULSATION: HOW TO DO IT is a monograph prepared by Dr. N. B. Thomson, the Nursing Staff, and Cardiovascular Specialists of St. Francis Heart Center, who are responsible for providing the intra-aortic balloon pump (IABP) management and patient care. The text consists of eight chapters which outline IAB anatomy, physiology, IAB indications, IAB history, Datascope IABP system set up for use, IAB insertion, IAB removal, Datascope IABP system operation and "timing," IAB patient nursing management, IAB patient monitoring, care of the Datascope IAB system, and the use of the IAB to generate pulsatile flow during cardiopulmonary bypass. A guide to inservice training for nurses and technicians who will be responsible for IAB patient management is found in the last chapter.

To the ardent student of the volume of IAB literature that exists in text,¹⁻⁶ the reading of **INTRA-AORTIC BALLOON COUNTERPULSATION: HOW TO DO IT** will not reveal any new concept or approach to IAB patient management. However, to the perfusionist, cardiovascular specialist, and ICU or OR nursing personnel newly exposed to IAB (especially the Datascope System), the reader will find a brief, inexpensive, comprehensive introduction to the problem of IAB insertion, operation, and IAB patient nursing and medical management. The ease of reading **INTRA-AORTIC BALLOON COUNTERPULSATION** and the outline format prepares any physician or paramedical personnel to manage the IABP and tackle the scientific literature pertaining to IABP usage.

INTRA-AORTIC BALLOON COUNTER-

PULSATION is not a replacement text or a supplement to Bolooki's **CLINICAL APPLICATION OF INTRA-AORTIC BALLOON PUMP**.³ Dr. Thomson's introduction to IAB insertion and physiology does not strike the same scientific intensity that Bolooki's chapter compiles. Dr. Thomson's first chapter is the only referenced work in this new IAB text.

Dana Adams and Damian Desiderio's Chapters Two and Four, How to Set Up the IABP For Use and How to Operate the Intra-Aortic Balloon Pump are more detailed than Rom's chapter in **CLINICAL APPLICATION OF INTRA-AORTIC BALLOON PUMP**.⁴ However, it is difficult for all three authors not to be redundant with Datascope Corporation's directions for use. The novice reader will argue that Chapters Two and Four in **INTRA-AORTIC BALLOON COUNTERPULSATION: HOW TO DO IT** are of little utility if the reader's institution employs the AVCO or SMEC IABP.

The majority of the 78 figures are reproduced or adapted from Datascope IAB or IABP user literature. The ECG and arterial pressure trace figures are adequate to illustrate the concept presented in the text but lack a time reference grid that would help clarify the point (Figure 68). IAB patient monitoring scopes generally lack vertical, time reference lines too. The authors do not acknowledge the use of the Datascope Corporation literature figures.

Chapter Five, Nursing Management of a Patient on the IABP in **INTRA-AORTIC BALLOON COUNTERPULSATION: HOW TO DO IT** does not differ greatly in content from a similarly titled chapter in the text edited by Bolooki.⁵ The nursing staff of St. Francis Hospital communicate well their educational approach to orienting IAB patient management nurses in Chapters Five and Eight in this new text.

For the open heart center employing the Datascope IABP System, INTRA-AORTIC BALLOON COUNTERPULSATION: HOW TO DO IT is an excellent tool to aid in orienting new medical staff or paramedical personnel to IABP logistics and operation and IAB patient nursing management.

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Bibliography

1. Kantrowitz, A.: Aortic Balloon Pumping in the Management of Left Ventricular Failure and Cardiogenic Shock. TEXTBOOK OF CORONARY CARE, Meltzer, L. E. and Dunning, A. J. (Ed.), Philadelphia: The Charles Press, 1972, pp. 594-607.
2. Bregman, D., Parodi, E. N., Hanbert, S. M., et al.: Unidirectional Intra-Aortic Balloon Pumping and Counterpulsation During Open Heart Surgery. MECHANICAL SUPPORT OF THE FAILING HEART AND LUNGS, Bregman, D. (Ed.), New York: Appleton-Century-Crofts, 1977, pp. 17-37.
3. Bolooki, H., The Effects of Counterpulsation with an Intra-Aortic Balloon on Cardiovascular Dynamics and Metabolism. CLINICAL APPLICATION OF INTRA-AORTIC BALLOON PUMP, Bolooki, H. (Ed.), New York: Futura Publishing Company, Inc., 1977, pp. 13-28.
4. Rom, L., The Function of the Datascope Intra-Aortic Balloon Pump, Ibid, pp. 67-83.
5. Kustrom, D., and Saunders, B., Nursing Management of Patients on the Intra-Aortic Balloon Pump (IABP). Ibid, pp. 101-110.
6. Bregman, D., Dual-Chambered Intra-Aortic Balloon Pump Counterpulsation. CURRENT TECHNIQUES IN EXTRACORPOREAL CIRCULATION, Ionescu, M. I. and Wooler, G. H. (Ed.), London: Butterworths, 1976, pp. 407-516.