



INTRODUCTION



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Surgery of the major vessels is now a common occurrence in operating theaters throughout the world. Improved surgical techniques, advances in monitoring, better anaesthetics and anaesthetic adjuvants, and greater understanding of normal and pathologic vascular physiology now allow surgical procedures that were once associated with prohibitive risk to be safely performed on a daily basis.

Although patients may present for surgery with symptoms involving only one vessel, vascular disease tends to be widespread and the patients almost invariably shows disease of other vessels like the central nervous system, myocardium and kidneys (*Webster et al., 1989*).

Coronary artery disease, arterial hypertension, chronic bronchitis and diabetes mellitus are the most frequently encountered disease complicating the clinical course of the vascular patients (*Reiz, Coriat, 1995*).

Vascular pathology in the aorta signifies the presence of similar pathologic changes in other parts of the arterial tree, some of which creates the potential for life threatening compromise of vital organ function (*Clark and Stanely, 1986*).

Endarterectomy is now established in the treatment of transient ischaemia associated with arterial obstruction, most frequently the result of atherosclerosis. (*Sabbawala et al., 1970*).

The problems that distinguish anaesthetic management of vascular operations from that of most other types of surgery includes:

- 1- Impairment of vital organ perfusion by pre-existing vascular disease and/or intraoperative vascular cross clamping.
- 2- Risk of sudden or profuse preoperative hemorrhage and problems of intraoperative blood conservation and salvage.
- 3- Adverse circulatory and hematologic changes resulting from massive blood transfusion.
- 4- Extreme fluctuations in circulatory dynamics and left ventricular after load produced by clamping and unclamping the abdominal or thoracic aorta.
- 5- Major physiologic changes resulting from exteriorization of bowel and retroperitoneal dissection or from dissection about the thoracic aorta and use of one lung ventilation (*Norman J.C., Theodore H.S., 1994*).