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In today's times, the life expectancy is increasing and this in turn has led to a higher number of elderly patients presenting for surgeries. Ischaemic heart disease is a disease of the elderly. Considerable challenges are faced by the anaesthesiologist while dealing with such patients. The dilemma exists as to what needs to be addressed first, the cardiac condition or the non cardiac disease? If the surgery is elective, coronary revascularisation should be considered and if non cardiac surgery is emergent then optimisation of patient is mandatory. Coronary revascularisation certainly decreases the risk of non-cardiac surgery. The cardiac risk factors are history of

Preoperative optimisation of IHD patient for non-cardiac surgery-Well begun is half done!

angina, myocardial infarction, congestive heart failure, stroke, diabetes mellitus requiring insulin and renal dysfunction with serum creatinine > 2mg/dl or creatinine clearance < 60 ml/ min. These risk factors further complicate to poor prognosis and hence should be addressed preoperatively.

The ACC/AHA guidelines include appropriate recommendations. Perioperative beta blockers and statins form class I recommendation. Preoperative cardiac stress testing is recommended for patients with > or equal to 3 cardiac risk factors undergoing high risk surgery class I indication (C), while preoperative angiography is recommended in STEMI, Non-STEMI and Unstable angina, class I(A) indication. Biomarkers like CRP, BNP, NT-proBNP are independent predictors of adverse outcomes in major non-cardiac surgery.

Choice of the technique of anaesthesia depends upon patient's cardiac condition, non-cardiac surgery and concomitant drugs. For regional anaesthesia, risks of thrombosis versus bleeding should be weighed when patient is on DAPT (dual

antiplatelet therapy) with 'stent in situ'. Bridging therapy should be considered as and when required.

General anaesthesia should always be administered considering the cardiac grid parameters like rate, rhythm, contractility, preload and afterload. Standard ASA monitoring and additional monitoring with intraarterial blood pressure, central venous pressure, cardiac output monitoring or transoesophageal echocardiography may be required. Such fundamental approaches lead to avoidance of potential complications like arrhythmias, CCF, pulmonary edema, CVA, sudden cardiac arrest.

Perioperative physicians, cardiologists and anaesthesiologists all need to work in agreement and have a role in stratification of risk, optimisation and proceedings to benefit the patient from the upcoming non-cardiac surgery. Optimum preoperative approach is quintessential for a positive outcome.

To extend the horizons in the management of IHD patients for non-cardiac surgery, utmost vigilance can make all the difference!

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