Abstract 35 'High'-Pertension

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Case Presentation: A 75-year-old male presented for preoperative evaluation prior to laparoscopic radiofrequency ablation of solitary liver metastasis from colorectal cancer. His exercise tolerance was greater than 4 METs. He had had intestinal surgery 6 months earlier without complications. His past medical history was significant for myocardial infarction in 2000 and 2004, hypertension (HTN), peripheral vascular disease, untreated sleep apnea, and tobacco use. He took carvedilol twice daily and had experienced side effects with several antihypertensives. Examination was unremarkable except for manual right arm blood pressure (BP) of 212/110 and a 2–3/6 blowing systolic apical murmur. Labs were normal except for a creatinine of 1.36. Electrocardiogram showed sinus bradycardia at 59 bpm, left ventricular hypertrophy, and inferior q waves. Persantine Cardiolite stress testing 1.5 years earlier demonstrated an ejection fraction of 51%, fixed inferior defect with some reversible ischemia, and minor septal wall motion abnormalities.

The patient was agitated. His BP had been 235/94 during surgical evaluation 2 weeks earlier, and he did not understand our concern. He refused new prescriptions, tests, or further physician evaluation. His surgeon and PCP were notified. On the morning of surgery, his sBP was in the 200s and was reduced to the 170s with parenteral medication. He tolerated surgery well but developed ventricular tachycardia/fibrillation 2 hours after surgery and died.

Discussion: Preoperative HTN is an important cardiovascular risk factor. Uncontrolled HTN can lead to labile intraoperative blood pressures, myocardial ischemia, arrhythmias, systolic dysfunction, renal insufficiency and neurological complications. Per ACC/AHA guidelines, uncontrolled HTN is only a "minor" risk factor. However, risks seem higher in patients with dBP > 110 and sBP > 180 and with end-organ damage such as congestive heart failure and renal insufficiency. Chronically elevated BP should be controlled for several weeks before elective surgery. Parenteral antihypertensives may be used prior to urgent surgeries.

This case underscores the need for communication between all teams involved in perioperative care. Our patient required further optimization but unfortunately refused any intervention and insisted on proceeding with surgery despite the risks. The importance given to his BP by the medical team was not reinforced by his PCP or the surgical or anesthesia teams. The lack of a unified message may have contributed to inadequate patient understanding of perioperative risks, and such poor communication adds to medicolegal liability. This situation was further complicated by the patient's diagnosis of metastatic cancer, which made it difficult to significantly delay his surgery.

Conclusion: Effective communication between various teams is extremely important to ensure optimal postsurgical outcomes.

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