

The measurement and management of adult blood pressure in the peri-operative period:

Updated guidelines from the Association of Anaesthetists and the British and Irish Hypertension Society



Updated Guideline

Maintaining stable blood pressure during surgery is a key responsibility of the anaesthetist. Multiple factors can cause fluctuations in blood pressure around the time of surgery including stopping medication, having a general anaesthetic or certain regional anaesthetic techniques. Management of patients with high blood pressure in the perioperative period is essential to reduce the risk of complications and limit cancellations.

This is an update of the 2016 guidance on the management of blood pressure in the perioperative period (from time of decision to operate until 30 days after surgery) for adults having planned surgery (excluding heart and lung, maternity and hormone disorder surgeries).



When to refer for surgery

Only refer patients with controlled blood pressure with a documented recording performed in last 12 months with levels:

Under 160/100 mmHg

When the measurement is performed by a healthcare professional

Under 155/95 mmHg

When measured at home by yourself or an ambulatory device



Opportunity to optimise

Occasionally blood pressure medications can cause low blood pressure on standing, called postural hypotension. At risk patients should have their blood pressure recorded when sitting and then standing to assess for a drop in blood pressure. Medications may need a review if postural hypotension is diagnosed.



Blood pressure in pre-operative assessment

Patients with a diagnosis of high blood pressure with normal blood pressure recorded with the GP or at home do not need a repeat blood pressure

If no blood pressure readings are available patients may continue to surgery if blood pressure is:

Under 180/120 mmHg

When the measurement is performed by a healthcare professional

Under 175/115 mmHg

When measured at home by yourself or an ambulatory device



Blood pressure medications around the time of surgery

Continue all normal blood pressure medications on the morning of surgery unless otherwise directed by your perioperative doctors. This now includes angiotensin-converting inhibitors and angiotensin-receptors blockers.



Prevent Intraoperative hypotension

Excess and prolonged periods of low blood pressure during surgery should be avoided. Individualised blood pressure targets should be used. Commonly used targets for at risk patients are: mean arterial pressure > 70 mmHg and systolic blood pressure > 100mmHg



Post surgery management

Monitor for and treat postoperative low blood pressure targeting a patients preoperative blood pressure. Reintroduce any withheld blood pressure medication according to the patients blood pressure.

