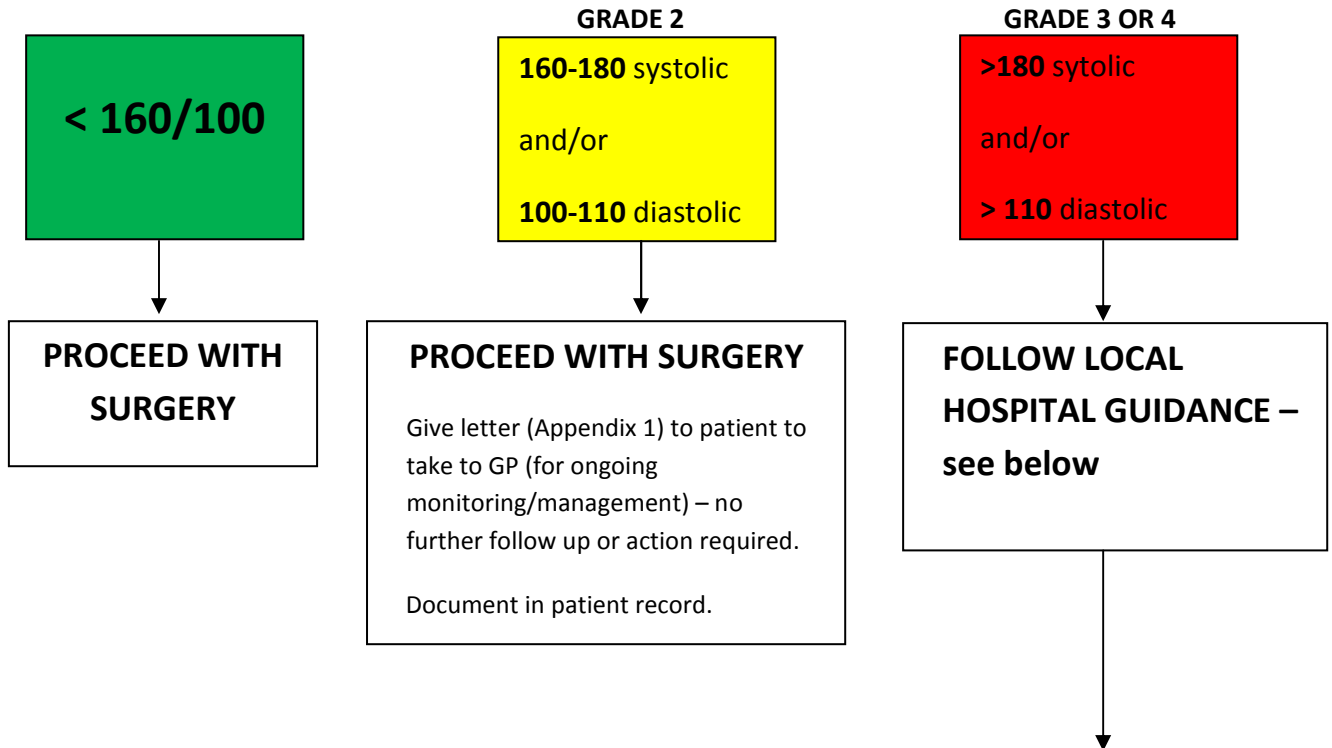


# Preoperative Assessment Guidelines

## Hypertension – management before elective surgery

- Check BP at PAC.
- If elevated above 160 systolic or 100 diastolic, repeat the measurement.
- If still elevated, repeat again.
- Use the lowest reading, and refer to guidance below.



|            |   |
|------------|---|
| <u>RIE</u> | <p><u>Arrange 24-hr BP monitor</u> (OPD2 - 21368/21453/21463). Send patient with completed request form. Monitor will usually have to be returned by patient the following day. PAC staff to log that this investigation has been requested, to ensure follow up. Report typically sent back to PAC within 7-10 days for anaesthetic review. See appendix 2 `Interpretation of 24-hr BP report and subsequent management`.</p> <p><u>If 24-hr BP monitoring cannot be arranged, patient should have elective/non-urgent surgery postponed</u> and be referred to GP for investigation/treatment/optimisation – see appendix 3 for template letter. Inform anaesthetist/PA-A – letter to be dictated to GP/surgeon.</p> <p>Severe Grade 4 Hypertension (systolic above 220 and/or diastolic above 130) – <u>inform medical staff before patient leaves clinic.</u></p> |
| <u>WGH</u> | Inform on-call registrar from relevant surgical team. Referral to ARU required.   |
| <u>SJH</u> | Discuss with the Medical Nurse Practitioner or PAA.   |

**Authors:**

Dr G Morrison (Consultant Anaesthetist)  
 Lindsay Rutherford (Physician Assistant, Anaesthesia)  
 Reviewed by RIE Pre-op Assessment Group: 2018

Date: November 2018  
 Review: November 2020

**Appendix 1** – Letter to be given to patient to take to GP, confirming patient had Grade 2 hypertension at PAC.

Dear Doctor

The above patient was found to have an elevated blood pressure at the preoperative clinic today – the measurement was \_\_\_\_\_mmHg. Although this level of hypertension does not require postponement of surgery, we have advised the patient to attend their GP practice for further assessment.

Thank you for your cooperation.

Yours sincerely

**Appendix 2** – Interpretation of 24 hour BP report and subsequent management

The report will typically be sent back to PAC within 7-10 days.

The `average awake reading` should be used.

Patients with Grade 3 hypertension (systolic >180 and/or diastolic >110) should have non-urgent surgery postponed, and should be referred back to GP for optimisation (minimum of 4-6 weeks treatment).

Patients with Grade 1 (140-159, and/or 90-99), Grade 2 (160-179, and/or 100-109), or white-coat hypertension should proceed with surgery.

Two copies of the report are provided by OPD 2 – one should be placed in the patient's notes and the other sent to the GP along with a dictated letter, templates for which are available – see appendix 4. A copy of this letter should be made available on TRAK.

Result should be communicated to patient.

Authors:

Dr G Morrison (Consultant Anaesthetist)  
Lindsay Rutherford (Physician Assistant, Anaesthesia)  
Reviewed by RIE Pre-op Assessment Group: 2018

Date: November 2018  
Review: November 2020

**Appendix 3** – Suggested template letter to GP for patients with Grade 3 hypertension at PAC who are unable to have 24-hour monitoring and require postponement (taken and modified from AAGBI/BHS BP guidelines 2016).

Dear Doctor

Unfortunately, the procedure for the above patient has been postponed because their blood pressure was found to be above the acceptable level for elective surgery. The AAGBI/BHS guidelines suggest a blood pressure level higher than 180/110 is unsuitable for elective procedures.

In this situation we usually try and arrange 24-hour ambulatory monitoring, but on this occasion this was not possible. We have asked the patient to make an appointment at their surgery for further assessment. We would be grateful if you could verify that this is the true blood pressure level and not a white coat effect and treat appropriately if the patient has hypertension – we would suggest a minimum of 4-6 weeks treatment.

We will be pleased to accept the patient back for surgery if their clinical blood pressure is below 160/100. Please get back in touch in due course so we can reschedule this procedure.

Many thanks for your help with this matter.

Authors:

Dr G Morrison (Consultant Anaesthetist)  
Lindsay Rutherford (Physician Assistant, Anaesthesia)  
Reviewed by RIE Pre-op Assessment Group: 2018

Date: November 2018  
Review: November 2020

**Appendix 4** – Template letters for sending to GP along with 24-hr BP report (Secretary has these templates. Also available on S-drive.).

GRADE 1 TEMPLATE

Dear Dr

Your patient is scheduled to have orthopaedic surgery and was found to have an elevated blood pressure at the pre-operative assessment clinic. A 24-hour ambulatory blood pressure assessment has since been performed. The average day-time systolic and diastolic pressures were [redacted] and [redacted] mmHg respectively. This represents **grade 1** hypertension. Although this level of hypertension does not require postponement of surgery it will require monitoring and treatment. I will leave this issue in your hands.

I enclose a copy of the report.

Yours sincerely

GRADE 2 TEMPLATE

Dear Dr

Your patient is scheduled to have orthopaedic surgery and was found to have an elevated blood pressure at the pre-operative assessment clinic. A 24-hour ambulatory blood pressure assessment has since been performed. The average day-time systolic and diastolic pressures were [redacted] and [redacted] mmHg respectively. This represents **grade 2** hypertension. Although this level of hypertension does not require postponement of surgery it will require monitoring and treatment. I will leave this issue in your hands.

I enclose a copy of the report.

You

NORMAL BP TEMPLATE

Dear Dr

Your patient is scheduled to have orthopaedic surgery and was found to have an elevated blood pressure at the preoperative assessment clinic. A 24 hour ambulatory blood pressure assessment has since been performed. The average day-time systolic and diastolic pressures were [redacted] and [redacted] mmHg respectively. This represents **adequate BP** control and no action is necessary.

I enclose a copy of the report.

Yours sincerely

Authors:

Dr G Morrison (Consultant Anaesthetist)  
Lindsay Rutherford (Physician Assistant, Anaesthesia)  
Reviewed by RIE Pre-op Assessment Group: 2018

Date: November 2018  
Review: November 2020

**Appendix 5** - Classification of hypertension.

| <b>GRADE</b> | <b>SYSTOLIC (mmHg)</b> | <b>DIASTOLIC (mmHg)</b> |
|--------------|------------------------|-------------------------|
| Normal       | Less than 140          | Less than 90            |
| 1            | 140-159                | 90-99                   |
| 2            | 160-179                | 100-109                 |
| 3            | 180-199                | 110-119                 |
| 4            | 200+                   | 120+                    |

**Reference**

Hartle A et al. The measurement of adult blood pressure and management of hypertension before elective surgery. Joint Guidelines from the AAGBI and The British Hypertension Society. *Anaesthesia* 2016; 71: 326-37.

Authors:

Dr G Morrison (Consultant Anaesthetist)  
Lindsay Rutherford (Physician Assistant, Anaesthesia)  
Reviewed by RIE Pre-op Assessment Group: 2018

Date: November 2018  
Review: November 2020