Guideline for the Management of Post-Carotid Endarterectomy Hypertension

Cerebral Hyperperfusion Syndrome is uncommon, but occurs in 1-3% of patients following carotid endarterectomy (CEA). It is due to a malfunction in the control of blood supply to the brain which will resolve as the pressure receptors in the carotid artery reset. Symptoms include headache, nausea and vomiting, visual disturbance and even fits. If not treated promptly it may result in brain haemorrhage which may be catastrophic. Good post-operative blood pressure control is the key to prevention of this complication.

In general the systolic blood pressure should be kept below 170 mmHg

If the patient’s blood pressure is higher than the set limit please call the doctors for assessment

Does the patient have a Headache?

No Patient does not have a headache

Yes patient has a headache

Hypertension needs urgently treating AND Immediately refer the patient to Critical Care (Consultant x62035, SpR bleep 8413)

Has the patient missed any doses of usual anti-hypertensive therapy?

If Yes - give it Now
If patient is taking more than one anti-hypertensive consider giving medications one by one an hour apart

Option 1 if HR > 60bpm
Give labetolol boluses 5-10 mg at a time, repeated after 5-10 mins, until BP under control (max 100mg)

Option 2 if HR < 60 or if labetolol given but ineffective
Give Hydralazine 2mg boluses slowly, repeat every 5 mins until BP under control (max 10mg)

If no doses have been missed or patient is not usually on antihypertensive therapy, give Amlodipine 5mg (if this drug has not already been given today), then reassess BP one hour later.

If BP still not within target range give Ramipril 2.5 - 5mg (if patient has not already taken this drug today) and reassess BP after one hour.

If BP still not in target range add Bisoprolol 2.5 - 5mg unless HR less than 60 bpm, then reassess BP one hour later, if still not controlled call for senior advice

Consider Dexamethasone 8mg if not already given, caution if diabetic.