Post Angiogram

If the patient has been directly admitted to following a Primary PCI, they will require clerking along with secondary prevention (Usually mentioned on the angiogram report)

Angiogram Procedure Report

The angiogram procedure report can be found on ICM. It usually contains details about the procedure performed, Medications given, and most importantly the Post Angiogram Plan.

There is also a green booklet labelled ‘Southwest cardiothoracic integrated care pathway' usually in the nursing folder. It contains the observations post angiogram.

Post Angiogram Plan

The post angiogram plan by the consultant is found on the angiogram procedure report (ICM). It is important to chase up and action the plan as soon as a patient returns to the ward from the Cath Lab. If a patient has gone down for an angiogram and has not yet returned to the ward it is important to handover to the on-call doctor to chase up.

What medications should you stop if there is no evidence of coronary artery disease on an angiogram?

This is usually mentioned on the post angiogram plan. Usually, Clopidogrel is stopped and aspirin may be continued however this is variable so please check before stopping anything. Secondary prevention medications are usually dose reduced or even stopped.

What medications should a patient continue/start if there is evidence of coronary artery disease or if they have undergone PCI?

- Dual anti-platelet therapy for 12 months
- Single anti-platelet (usually aspirin) lifelong
- If a patient is on triple therapy (i.e DAPT and anti-coagulant) – the choice of anticoagulant is patient specific following the PCI procedure. This will be clarified in the procedure report but please discuss with the PCI consultant/ SpR when this is not clear.
- Atorvastatin 80mg ON
- Bisoprolol (note in patients with LVEF ≤ 40%, start at low dose and uptitrate dose as tolerated by BP/HR – usually uptitrated to 10mg in community).
- ACE-I/ARB (if ACE-I not tolerated): start at low dose and uptitrate dose as tolerate by BP/U&Es (usually uptitrated to maximum dose in community.)

NICE GUIDANCE - SECONDARY PREVENTION DRUG THERAPY

Important Complications Post Angiogram/PCI

Most patients have their angiogram performed via a radial access. In those with a weak radial pulse, a femoral access may be required. This means that there is risk of bleeding, hematoma and false-aneurysms. A retroperitoneal bleed (femoral access) is a life-threatening emergency so warrants prompt senior review. You may occasionally get called to review sites post procedure, if any concerns, please escalate to the SpR. Always check the sites or confirm with the nursing staff, prior to discharge.

Retroperitoneal Bleed

It is the most common cause of unexpected mortality after diagnostic or interventional cardiac catheterization

Clinical features

- Often asymptomatic
- Suprainguinal tenderness and fullness
- Sudden flank or back pain with hemodynamic instability

Diagnostics

Prompt diagnosis is a priority: **CT with contrast** of the abdomen and pelvis in hemodynamically stable patients or sonography in unstable patients

Treatment

- Predominantly supportive treatment: careful monitoring, fluid resuscitation, blood transfusion, and normalization of coagulation factors if abnormal
- EARLY ESCALATION

Hyperglycemia In Acute Coronary Syndromes

For patients both with and without diabetes mellitus, hyperglycemia on admission is a powerful predictor of poorer survival and increased risk of complications while in hospital

It is important to check CBG and HbA1C in all patients admitted due to ACS.

Aim for a CBG 6-12mmol/l. If CBG > 12 check ketones to exclude DKA/HHS

CLICK HERE FOR UHPT GUIDELINE FOR MANAGEMENT OF HYPERGLYCEMIA IN ACS

If CBG ≥ 12 refer the patient to the DSN

If HbA1C between 42-47 the patient is in the prediabetic range, Inform the GP on the TTA to follow up and monitor HBA1C

If HbA1C ≥ 48 This likely indicates diabetes, refer the patient to the diabetic team (SeeEHR form)

Advice and ongoing monitoring for patients with hyperglycemia and without known diabetes

Advise that hyperglycemia after ACS indicates increased risk of type 2 diabetes and patients should consult their GP if they have frequent urination, excessive thirst, weight loss, fatigue.
Offer lifestyle advice in line with NICE guidance on:

- – healthy eating
- – physical exercise
- – weight management
- – smoking cessation
- – alcohol consumption

Inform GPs that they should offer at least annual monitoring of HBA1c and fasting blood glucose to people without known diabetes

NICE GUIDANCE - HYPERGLYCEMIA IN ACUTE CORONARY SYNDROME

Important Information For The TTA

For ACS patients, it is good practice to write down whether they have had an angiogram and its result. The consultants do also dictate a letter to the GP detailing the angiogram findings. Include follow up details in your TTA, usually 3/12 with the consultant who performed the angiogram/PCI via telephone clinic unless stated otherwise by consultant. The information for follow up can be written in the top section of the TTA. You should also leave a note for the GP to up-titrate secondary prevention medication as appropriate and re-check U&Es in 2 weeks.

The Following table is a summary of advice that should be provided to the patient and preferably mentioned on the TTA

Guideline	Year of publication	Target group	Dietary	Physical activity	Weight management	Smoking cessation	Alcohol	Cardiac rehabilitation	Other (specify)
MI: secondary prevention (NICE clinical guideline 48)	2007	People who have had an MI	Including increased omega 3, eating a Mediterranean style diet and general healthy eating advice	Including regular physical activity for 20–30 minutes a day	Include advice and support to achieve and maintain a healthy weight for overweight or obese patients (see 'Obesity', NICE clinical guideline 43 for details)	Include advice to quit and assistance from smoking cessation service for all patients who smoke and referral to intensive support service for those expressing desire to quit	Advise to keep within safe limits of consumption	Include cardiac rehabilitation programme with exercise component, health education and stress management components	N/A
Unstable angina and NSTEMI (NICE clinical guideline 94)	2010	People with unstable angina Advice should be given before discharge	Lifestyle changes in line with 'MI: secondary prevention'	Lifestyle changes in line with 'MI: secondary prevention'	Lifestyle changes in line with 'MI: secondary prevention'	All patients who smoke should be advised to quit and be offered support and advice, and referral to intensive support service	Lifestyle changes in line with 'MI: secondary prevention'	This should be in line with 'MI: secondary prevention'	Diagnosis and arrangement for follow-up, management of cardiovascular risk factors and drug therapy for secondary prevention

[NICE GUIDANCE - IMPORTANT INFORMATION TO MENTION ON THE TTA]

[NICE GUIDANCE - LIFESTYLE ADVICE AFTER AN MI]

DVLA Driving Restrictions Admitted With ACS +/- Angioplasty

It is important to mention any driving restrictions the patient may incur due to the procedure to the patient as well as on the TTA. Driving restrictions vary depending on treatment and Driving license groups

Car or motorcycle licence

You don't need to tell DVLA if you've had a heart attack (myocardial infarction) or a heart, cardiac or coronary angioplasty.

However, you should stop driving for:

- 1 week if you had angioplasty, it was successful, and you don't need any more surgery
- 4 weeks if you had angioplasty after a heart attack but it wasn't successful
- 4 weeks if you had a heart attack but didn't have angioplasty

Check with your doctor to find out when it's safe for you to start driving again.

Bus, coach or lorry license

You must tell DVLA and stop driving for 6 weeks if you've had a heart attack (myocardial infarction) or a heart, cardiac or coronary angioplasty.

Fill in form VOCH1 and send it to DVLA. The address is on the form.

You must take an assessment with your doctor or GP after 6 weeks to see if you meet the medical standard to start driving again. DVLA might arrange for you to have specific tests, depending on your condition.

FURTHER INFORMATION ABOUT ASSESSING FITNESS TO DRIVE