I'm not a robot

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exam table.A provider will secure your head with a strap, tape or a foam head holder.A provider will sterilize the area of your body where they’ll insert the catheter (a long, thin plastic tube) — usually in your groin, leg or arm.A provider will numb the area with a local anesthetic injection. This may briefly burn or sting before the area becomes
numb.The provider will make a very small skin incision at the site where they’ll insert the catheter.Using imaging guidance, they’ll insert a catheter into an artery through a tiny hole they make with a needle. You may feel some pressure when this happens, but it shouldn’t hurt.They’ll then guide the catheter through the artery in your body until it
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causing a stroke. This is rare — it happens in fewer than 1% of cases.Your provider will go over the risks of the procedure with you before the exam. Don’t hesitate to express your concerns or ask any questions. Cerebral angiography is done in the hospital or radiology center. You lie on an x-ray table.Your head is held still using a strap, tape, or
sandbags, so you do not move it during the procedure.Before the test starts, you are given a mild sedative to help you relax.An electrocardiogram (ECG) monitors your heart activity during the test. Sticky patches, called leads, will be placed on your arms and legs. Wires connect the leads to the ECG machine. An area of your body, usually the groin or
wrist, is cleaned and numbed with a numbing medicine (local anesthetic). A thin, hollow tube called a catheter is placed through an artery. The catheter is carefully moved up through the main blood vessels into an artery in the neck. X-rays help your health care provider (usually a specially trained radiologist) guide the catheter to the correct
position.Once the catheter is in place, dye is sent through the catheter. X-ray images are taken to see how the dye moves through the artery and blood vessels of the brain. The dye helps highlight any blockages in blood flow.Sometimes, a computer removes the bones and tissues on the images being viewed, so that only the blood vessels filled with the
dye are seen. This is called digital subtraction angiography (DSA).After the x-rays are taken, the catheter is withdrawn. Pressure is applied on the leg or wrist at the site of insertion for 10 to 15 minutes to stop the bleeding or a device is used to close the tiny hole. A tight bandage is then applied. Your leg should be kept straight for 2 to 6 hours after
the procedure. Watch the area for bleeding for at least the next 12 hours.Angiography with a catheter is used less often now. This is because magnetic resonance angiography (MRA) and CT angiography give clearer images and do not require placing a catheter.Page 2Barras CD, Bhattacharya JJ. Current status of imaging of the brain and anatomical
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Family Medicine, UW Medicine, School of Medicine, University of Washington, Seattle, WA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team. In preparation for a cerebral angiogram, your healthcare provider will make sure it’s safe for you to undergo the test. They’ll
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procedure with you before the exam. Don’t hesitate to express your concerns or ask any questions. Angiography is a type of X-ray used to check blood vessels.Blood vessels do not show clearly on a normal X-ray, so a special dye called a contrast agent needs to be injected into your blood first.This highlights your blood vessels, allowing your doctor to
see any problems.The X-ray images created during angiography are called angiograms. Angiography is used to check the health of your blood vessels and how blood flows through them.It can help to diagnose or investigate several problems affecting blood vessels, including:Angiography may also be used to help plan treatment for some of these
conditions. Angiography is done in a hospital X-ray or radiology department.For the test:you'll usually be awake, but may be given a medicine called a sedative to help you relaxyou lie on an X-ray table and a small cut (incision) is made over 1 of your arteries, usually near your groin or wrist – local anaesthetic is used to numb the area where the cut is
madea very thin flexible tube (catheter) is inserted into the arterythe catheter is carefully guided to the area that's being examined (such as the heart)a contrast agent (dye) is injected into the cathetera series of X-rays are taken as contrast agent flows through your blood vesselsThe test can take between 30 minutes and 2 hours. You'll usually be able
to go home a few hours afterwards.Read more about what happens before, during and after angiography. Angiography is generally a safe and painless procedure.But for a few days or weeks afterwards it's common to have:bruisingsorenessa very small lump or collection of blood near where the cut was madeThere's also a very small risk of more
serious complications, such as an allergic reaction to the contrast agent, a stroke or a heart attack.Read more about the risks of angiography. There are several different types of angiography, depending on which part of the body is being looked at.Common types include:coronary angiography – to check the heart and nearby blood vesselscerebral
angiography – to check the blood vessels in and around the brainpulmonary angiography – to check the blood vessels supplying the lungsrenal angiography – to check the blood vessels supplying the kidneysOccasionally, angiography may be done using scans instead of X-rays. These are called CT angiography or MRI angiography.There's also a type of
angiography that's used to check the eyes, called fluorescein angiography. It's different to the other types of angiography and is not covered in this topic. Page last reviewed: 30 January 2023 Next review due: 30 January 2026 Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix,
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use the material. MeSH Heading Cerebral Angiography Tree Number(s) E01.370.350.578.937.180 E01.370.350.700.060.180 E01.370.350.700.560.180 E01.370.370.050.180 E01.370.376.537.750.180 E05.629.937.180 Unique IDD002533 RDF Unique Identifier Scope NoteRadiography of the vascular system of the brain after injection of a contrast
medium. Entry VersionCEREBRAL ANGIOGR Entry Term(s) Angiography, Cerebral NLM Classification # WL 141.5.C4 Date Established 1966/01/01 Date of Entry 1999/01/01 Revision Date 2016/03/18 A cerebral angiogram checks for abnormalities in the blood vessels of your brain. The procedure has a handful of related names. These include:Carotid
angiogram or angiographyCerebral angiogram or angiographyCerebral arteriogramCerebral angiography is the process of performing an X-ray on your brain. A cerebral angiogram refers to the X-ray itself. You may see the terms used interchangeably.A cerebral angiogram is the result of a type of X-ray called cerebral angiography. The X-ray checks
the blood vessels and blood flow in your head, brain, or neck by using a special contrast dye.How it’s done. A catheter is inserted into an artery. It is injected with a contrast dye that spreads through your bloodstream. This causes your blood vessels to be visible in an X-ray.Your doctor may suggest cerebral angiography to diagnose conditions, locate
or identify abnormalities, and minimize complications before surgery. This procedure may be suggested if previous tests didn’t provide conclusive information. Results. Cerebral angiography can reveal a variety of abnormalities in your blood vessels, such as:Bulging or ballooning of blood vessels: aneurysmNarrowing of your blood vessels:
stenosisNarrowing of your arteries: atherosclerosisInflammation that causes narrowing: vasculitisAbnormal connection or tangle of vessels: arteriovenous malformationBlood clot: thrombosisBlood vessel spasms: vasospasmTotal blood vessel blockageThere are extra risks that accompany cerebral angiography since it involves radiation, including:Side
effects of radiation exposure if you have a history of X-rays and CT scansExposure to radiation while pregnant can lead to birth defectsAllergic reaction to the contrast dye used for the testComplications caused by conditions or medications that affect blood-thinning or clottingThere is a small risk of the following serious complications involving your
blood vessels and brain:Fainting and loss of consciousnessTransient ischemic attack (TIA): ministrokeParalysis only on one side of the body: hemiplegiaBlood clots: embolusBleeding or bruising at the puncture site: hematoma InfectionStrokeLoss of speech abilities: aphasiaCerebral angiography isn’t recommended if you have a condition that affects
your kidneys, liver, or thyroid.Your doctor will explain how cerebral angiography works and will give you time to ask questions. You will then need to sign a consent form for the procedure.Risk factors. Tell your doctor if you have any allergies or sensitivities, are pregnant, have a history of bleeding disorders, or if you are taking blood thinners. Some
allergies that may cause complications during this procedure include:Contrast dyeIodineShellfishAny medicationsLatexTapeAnesthesiaFood and drugs. Your doctor will likely ask you to fast before the procedure. They may also ask you to stop taking anticoagulants (blood thinners) before the procedure to prevent complications.Your doctor may
provide you with medication to promote relaxation. Have someone give you a ride to the appointment since this will likely make you sleepy.Additional tests. Your doctor may order additional tests to reduce possible risks during the cerebral angiography. For example, they may perform a blood test to determine the time it takes for your blood to
clot.Relief. Depending on the injection site, you may need to stay flat on a bed for several hours after the procedure. Your doctor may recommend ice or pain medications to relieve pain and swelling during that time.Diet. You can typically return to your normal diet after the procedure unless your doctor says otherwise. You’ll be encouraged to drink
fluids to get the contrast dye out of your body.Activity. You can typically return to your normal activities within 8 to 12 hours. Your doctor may suggest avoiding strenuous activities for some time.When to call your doctor. A small bruise or occasional light bleeding at the injection site is normal. But monitor the limbs near the injection site for changes
in temperature, abnormal colors, pain, numbness, or loss of function. Call your doctor if any of these changes occur.You should also call your doctor if you notice any of the following symptoms:Chills or feverWorsening pain, redness, swelling, bleeding, or abnormal drainage from the injection siteChanges in speech or visionDizzinessMuscle
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notes and you may take this information leaflet home with you. Important things you need to know Patient choice is an important part of your care. You have the right to change your mind at any time - even after you have given consent and the procedure has started - as long as it is safe and practical to do so.We will only carry out the procedure on
your consent form unless, in the opinion of the health professional responsible for your care, a further procedure is needed in order to save your life or prevent serious harm to your health. However, there may be procedures you do not wish us to carry out and these can be recorded on the consent form.We are unable to guarantee that a particular
person will perform the procedure. However the person undertaking the procedure will have the relevant experience.All information we hold about you is stored according to the Data Protection Act 1998. Who is the leaflet for? What is its aim? This leaflet is for patients scheduled to undergo a cerebral angiogram of the brain. About cerebral
angiogram of the brain An angiogram is an x-ray test used to produce pictures of blood vessels. A cerebral angiogram shows the blood vessels in your head and neck. Cerebral angiograms provide more detailed images than other non-invasive techniques such as CT angiography and MR angiography. The extra detail helps to make a more accurate
diagnosis. Who will perform my procedure? This procedure will be performed by a Consultant or Specialist registrar in radiology. What happens before the test? A doctor will ask you about your medical history and any medication you are taking, and will explain the test to you. Please bring all your medications and any packaging (if available) with
you. They will ask you for your consent for the test. If you are too unwell to give your consent, the procedure will be discussed with your family. If you are coming to us as a day case, you will be allowed to eat or drink before the test.You will need to arrange a lift to and from hospital as you will not be allowed to drive after the procedure for 24 hours.
If you are taking blood thinning drugs (also known as anticoagulant or antiplatelet drugs) then please inform the Radiology Day Unit on 01223 274287 as soon as you get the appointment. Examples include: warfarin, rivaroxaban, apixaban, edoxaban, aspirin, clopidogrel, prasugrel, ticagrelor, dabigatran, dipyridamole and acenocoumarol.If you are
taking metformin please ask your GP to check your creatinine levels and inform us of the result a week before your angiogram; you may be asked to stop taking your metformin for 24 hours following the procedure.This procedure involves the use of local anaesthesia.Most people who have this type of procedure will need to stay in hospital for four
hours after the procedure. What happens during the procedure? The procedure is carried out in the radiology department in a room with large, high-technology computerised equipment.There will usually be at least three people in the room during the procedure: a radiologist, a radiographer, and a nurse.You will be asked to lie on an x-ray table in the
room. The doctor or nurse will shave a small area in your groin and clean the area with an antiseptic solution; they will then put a large sterile drape over the area.The radiologist will use local anaesthetic; this may be a little uncomfortable to begin with.The radiologist will then put a very small tube (catheter) into the blood vessel in your groin (the
femoral artery). This is passed through other blood vessels in your body until it reaches your neck. You will not feel it moving inside you. The radiologist will then position the tube into different blood vessels in the neck. While this happens, you will receive injections of a special dye (called contrast agent) to produce the radiological images
required.The injections may give you a localised hot feeling in the neck, head, face or arm, but this goes away quickly. You may see flashing lights - this is normal.Before taking the first picture, the radiographer will move the equipment around you into the correct position. More pictures are taken with further injections.It is very important that you
remain still throughout the procedure to ensure the pictures taken are as clear as possible.The whole procedure is likely to take up to one hour.We want you to be informed about your choices to help you to be fully involved in making any decisions so please ask about anything you do not fully understand or wish to have explained in more detail
before the procedure. What happens after the procedure? Once your angiogram is completed you will usually be transferred to the Radiology Day Unit where you will be looked after by specially trained nurses, under the direction of your radiologist. The nurses will monitor you closely and regularly check on the arterial puncture site in your groin.
Bruising at the top of the leg is common following an angiogram. This should go after a few days. If the bruising is excessive or a lump develops after you have been discharged please contact your GP. If you feel unwell, dizzy or light headed or there is active bleeding, press firmly on the puncture site and go to the nearest Accident and Emergency
department. You will be advised on when to restart any medication that was stopped prior to the procedure. After this procedure, you can eat and drink normally.Getting about immediately after the procedureAfter this procedure, you need to lie on your bed, usually for four hours (the length of time depends on the size of catheter used). The nurses
will ask you to keep your leg still for the first couple of hours to allow the artery to heal. We will try to get you mobile (up and about) as soon as we can to help prevent complications from lying in bed. Typically, you will be able to get up after four hours. If we think you will have problems getting about, we will arrange for extra assistance, for example
nursing help.Leaving hospitalMost people who have had this type of procedure under local anaesthetic will be able to leave hospital after four hours. The actual time that you stay in hospital will depend on your general health, how quickly you recover from the procedure and your doctor's opinion.You should not drive home after the procedure and for
a further 24 hours. Please arrange for someone to drive you home. Someone will also need to be at home with you for the night following the procedure.Resuming normal activities including workMost people who have had this procedure can resume normal activities after 24 hours. You will be given more detailed information about any special
measures you need to take after the procedure. You will also be given information about things to watch out for that might be early signs of problems such as swelling or pain in the groin. Significant, unavoidable or frequently occurring risks of this procedure 1 in 100 patientsTransient neurological symptoms (headache, limb weakness, difficulty with
speech or loss of vision). This will usually last for a few hours although in some cases there is a permanent disability (1 in 200 patients or less).1 in 200 patientsCirculatory problems in the leg because of the damage to the femoral artery (e.g. painful swelling of the artery). These problems usually settle with simple treatment like compression of the
artery but may require a day in hospital.Damage to the femoral nerve which lies next to the artery in the groin.1 in 500 patientsLoss of circulation to the leg from blockage of the artery requiring further treatment.Serious blood loss.Allergic reaction to contrast agent, latex or local anaesthetic. Please let us know if you have any allergies. Alternative
procedures that are available Other tests to demonstrate blood vessels, for example CT or MR angiography, do not give as much detail. You may have had these other tests already.You may decide not to have this test or to delay it whilst you make up your mind. For some conditions, delaying may carry additional risk.Discuss this with the doctor who
referred you for your angiogram.An alternative to this procedure is a decision not to have the angiogram. We will discuss with you the implications of deciding not to have the angiogram. In local anaesthesia the anaesthetic drug is injected into the skin and tissues at the site of the blood vessel in the groin. The area of numbness will be restricted and
some sensation of pressure may be present, but there should be no pain. Local anaesthesia is used for minor procedures such as stitching a cut. Local anaesthetic will be given by the doctor doing the procedure. Contacts and further information Please call the nurses on the Radiology Day Unit on telephone number 01223 274287 if you have any
questions or concerns about this procedure or your appointment. Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required. Smoking is not allowed anywhere on the hospital campus. For advice and support in quitting,
contact your GP or the free NHS stop smoking helpline on 0800 169 0 169. Other formats Help accessing this information in other formats is available. To find out more about the services we provide, please visit our patient information help page (see link below) or telephone 01223 256998. www.cuh.nhs.uk/contact-us/accessible-information/ Contact
us Cambridge University Hospitals NHS Foundation Trust Hills Road, Cambridge CB2 0QQ Telephone +44 (0)1223 245151 An angiogram is a type of X-ray used to examine blood vessels. Blood vessels don’t show up clearly on ordinary X-rays, so a special dye is injected into the area being examined. The dye highlights the blood vessels as it moves
through them. The medical name for this is a catheter angiogram. Less commonly, angiograms can also be carried out using magnetic resonance imaging(MRI) and computerised tomography (CT) techniques. These pages mainly focus on catheter angiograms. An angiogram can help diagnose conditions that affect blood vessels and the flow of blood
through them. These include: coronary heart disease – the blood flow through the artery that supplies the heart muscle is disrupted because it has become narrowed aneurysm – a section of a blood vessel wall bulges outwards due to a weakness in the wall atherosclerosis – blood vessels become clogged up with fatty substances, such as cholesterol;
an angiogram can be used to assess the level of atherosclerosis in specific blood vessels The image on an angiogram can also be used to help plan procedures such as angioplasty and stenting or surgery. Read more about what an angiogram is used for. The following short film is of Dr Peter Henriksen, Consultant Cardiologist for NHS Scotland,
explaining what you need to know before having coronary angioplasty and stenting. This video requires YouTube cookies. Update your consent. An angiogram is carried out in hospital. It takes between 30 minutes and 2 hours, depending on the complexity of the procedure. You will usually be allowed to go home on the same day, although in some
cases you may need to stay in hospital overnight. In most cases, angiograms are planned procedures that are performed under local anaesthetic. However, general anaesthetic may be used if young children need to have the procedure. The doctor will feed a catheter (a very thin, flexible tube) into one of your arteries, usually through an incision (cut)
in your groin or wrist. They will then guide the catheter into the area that needs to be examined, while a radiographer moves the X-ray machine into position for the images. The dye (medically known as a contrast dye or contrast medium) is injected through the catheter and into the blood vessel. A series of X-rays is then taken. Read more about what
happens during an angiogram. An angiogram is a generally safe and painless procedure. The risks of serious complications are low. Sometimes, an angiogram can cause bruising where the catheter is inserted. Also, some people may occasionally have an allergic reaction to the contrast dye. This is usually easily treated with medication. Read more
about the complications of an angiogram. If you have circulation problems, your GP may recommend that you have an angiogram to find out what’s causing the problem. The results of an angiogram can also help to determine suitable treatment options. Dense areas of your body such as your bones and, to a lesser extent, certain organs, such as your
lungs, absorb X-rays, so they show up as clear white areas on X-ray images. However, conventional X-rays don’t produce clear images of blood vessels and blood flow. During an angiogram, a special type of dye (medically known as a contrast dye or contrast medium) is injected into the area where the blood vessels are to be examined. Like your bones
and other dense areas of the body, the contrast dye absorbs X-rays. As the contrast dye moves through your blood vessels, a series of X-rays can be taken to examine how it moves. By tracking its movement, it’s possible to identify any problems with the blood vessels, such as blockages or sections that are unusually narrow. A similar procedure that’s
used to study the blood vessels in your head and neck is called a cerebral angiogram. A cerebral angiography may be used if it’s thought that the blood vessels supplying blood to your brain (the carotid arteries) have become narrowed, disrupting the flow of blood. This can be dangerous because it could trigger a stroke or a transient ischemic
attack(mini-stroke). If you’ve had a stroke, a cerebral angiogram can be used to assess the extent of the damage to the blood vessels. In some cases, it may be able to pinpoint the underlying cause of a stroke. A cerebral angiogram can also help to identify an aneurysm (a bulge in the blood vessel wall in your brain) or a brain tumour, which is an
abnormal growth of tissue in the brain. Studying the flow of blood to the tumour can help to determine whether it’s growing, which can be useful when planning treatment. Coronary angiography is used to study the blood vessels that supply the heart muscle. It may be used if you have any of the following conditions: heart attack – a serious medical
emergency where the supply of blood to the heart is suddenly blocked, usually by a blood clot angina – chest pain that occurs when the blood supply to the heart is restricted coronary heart disease – your heart muscle’s blood supply is blocked or interrupted by a build-up of fatty substances in the coronary arteries (the blood vessels that supply the
heart) A coronary angiogram may also be used if you have a heart condition. It helps to determine the most appropriate type of treatment for you. This might be: a coronary angioplasty and stenting – a procedure to widen blocked or narrowed coronary arteries coronary artery bypass graft – a surgical procedure to divert blood around narrow or
clogged arteries in order to improve the blood flow to the heart muscle aortic valve replacement – surgery to treat problems that affect the aortic valve, which is the valve that controls the flow of blood out of the left ventricle of the heart to the body’s main artery, the aorta A pulmonary angiogram can be used to examine the blood vessels in the lungs.
It’s usually done when a person has a blood clot in one of the blood vessels in their lungs. This is known as a pulmonary embolism. Performing a traditional catheter angiogram carries a high risk of complications. Therefore, another type of angiography, known as a computerised tomography pulmonary angiography (CTPA), is usually the preferred
option. A CTPA involves injecting contrast dye into the blood vessels of your lungs before taking a CT scan. If you have a pulmonary embolism in one of your lungs, it will show up on the CT scan as a blockage in your blood supply. An extremity angiogram can be used to examine the blood vessels in your arms and legs. This procedure is often used if
it’s thought that the blood supply to your leg muscles has become restricted. This is known as peripheral arterial disease and it causes a range of symptoms, the most common of which is painful cramping when walking. An extremity angiogram can also be used to check for narrowing and hardening of the arteries (atherosclerosis, see below) in the
arms and legs. Renal angiograms can be used to examine the blood vessels in your kidneys. It may be recommended if you have symptoms, which suggest that the blood supply to your kidneys has been blocked in some way. These symptoms include: high blood pressure (hypertension) that doesn’t respond to treatment with medication swelling in
certain areas of your body, such as your feet, due to a build-up of fluid (oedema) symptoms of kidney disease, such as itchy skin and blood in your urine Atherosclerosis is a condition in which one or more of the arteries becomes narrowed and hardened due to a build-up of fatty materials, such as cholesterol. These types of material are collectively
known as plaques. Atherosclerosis is potentially dangerous because it can lead to organ failure and tissue death (gangrene). Plaques may also rupture causing events such as a heart attack or stroke. During its early stage, atherosclerosis doesn’t usually cause any noticeable symptoms, so the most effective method for early diagnosis is to identify
people who are in high-risk groups and test them for the condition. High-risk groups for atherosclerosis include people who: are over 40 years old are overweight or obese smoke or have a previous history of heavy smoking have a high-fat diet have uncontrolled high blood pressure are diabetic have high cholesterol have a family history of
cardiovascular disease are from south Asian ethnic decent An angiogram is usually only carried out if initial tests, such as blood cholesterol tests and blood pressure tests, suggest that atherosclerosis is likely and symptoms have developed. An angiography can also be used to: locate the site of internal bleeding detect blood clots investigate injuries to
organs plan surgery that involves the blood vessels If you have problems with your circulation, your GP may recommend an angiogram to find out what’s causing the problem. The results will help decide what the treatment options are. As blood vessels supply blood to every part of your body, any part can be affected by circulation problems. The
major internal organs (your heart, brain and kidneys) and the extremities (your arms and legs) are affected if the blood supply to them is changed by blockages or arterial disease (disease of the arteries). Problems caused by serious arterial disease include: strokes heart attacks gangrene (tissue death) organ failure Therefore, problems with your
circulation should be investigated as soon as possible. The condition of your arteries can be assessed, and appropriate treatment options suggested. Depending on the complexity of the investigation, an angiography takes between 30 minutes and 2 hours. You will usually be allowed to go home on the same day, although in some cases you may need to
stay in hospital overnight. An angiography is usually a planned procedure. However, it may occasionally be done on an emergency basis – for example, in the case of a heart attack. In cases where an angiogram is planned, you’re likely to have an initial appointment to discuss a number of issues. As part of these discussions, you may be asked: about
your medical history whether you have any allergies whether you’re currently taking any medication You may also have a number of standard tests shortly before having an angiogram. These may include: blood pressure blood tests to check how well organs, such as your kidneys or liver, are working heart rate (pulse, ECG) Before having an
angiogram, some people may be offered a sedative to help them relax. You will be asked not to eat for several hours before having the procedure. Your care team will be able to give you a precise recommendation. Most angiography procedures are carried out using local anaesthetic to numb the area of skin where the catheter (see below) is going to
be inserted. However, general anaesthetic (where you’re asleep) is sometimes used when young children need to have the procedure. This is because it may be upsetting for them or they may find it too difficult to stay still during the procedure. An angiogram is usually carried out by a senior doctor who specialises in cardiology, a radiographer (to
operate the X-ray equipment), a cardiac technician (to monitor your heart during the procedure) and a nurse (to assist with the procedure itself). An intravenous (IV) line will be inserted into a vein in your arm. It can be used to deliver sedatives or any other medication as required. Electrodes (small, metallic discs) are also placed on your chest to
monitor your heart during the procedure. A blood pressure monitor will be attached to your arm. A catheter (a thin, flexible tube) is then inserted into one of your arteries, usually either in the groin or wrist. The doctor will use X-rays or, in some cases, a CT or MRI scanner, to help guide the catheter to the area being examined. Contrast dye will then
be injected through the catheter, and a series of X-rays will be taken. The procedure isn’t painful, but you may feel a slight sensation of warmth or a mild burning sensation as the contrast dye moves through your blood vessels. It can take between 30 minutes and 2 hours to complete the procedure, depending on the complexity of your condition and
the condition of your arteries. In some cases, other procedures can be carried out during an angiogram, such as inserting a balloon, or a small tube called a stent, through the catheter to open up a narrowed artery. This is known as an angioplasty. Once the procedure has been completed, the catheter will be removed and the incision will be closed
using manual pressure, a plug or a clamp. Following an angiogram, you will usually be taken to a recovery ward. You will be asked to lie still for a few hours to prevent bleeding at the site of the incision. After having an angiogram, most people are able to leave hospital on the same day. However, you may occasionally need to stay in overnight for
observation. You’ll be able to eat and drink as soon as you feel ready to. It may take a few hours before you’re well enough to get up and walk around. Depending on what the doctor finds during your angiogram, they may be able to discuss your results with you shortly after the procedure. A full report of the results of your investigation and any
procedure carried out will be sent to your doctor. Minor complications that can occur following an angiography procedure include: excessive bleeding at the site of the incision infection at the incision site, which may need to be treated with antibiotics a mild to moderate allergic reaction to the contrast dye; this can usually be controlled using anti-
allergy medication More serious complications can include: blood clots kidney damage stroke blood vessel damage a serious, life-threatening allergic reaction (anaphylaxis) to the contrast dye These serious complications are very rare. For example, only an estimated 1 in 1,000 people will have a stroke as a result of having an angiogram;
approximately 1 in 50,000 to 150,000 people will experience anaphylaxis. In almost every case, the benefit of having an angiogram far outweighs any potential risk. In preparation for a cerebral angiogram, your healthcare provider will make sure it’s safe for you to undergo the test. They’ll likely do a physical exam, order certain blood tests and ask
you questions about your medical history.Be sure to tell your provider:Which medications you’re currently taking, including supplements and other over-the-counter (OTC) medications.If you have any medical conditions or had any recent illnesses.If you have a history of bleeding problems or take blood-thinning medications. This includes nonsteroidal
anti-inflammatory drugs (NSAIDs).If you have any allergies, especially to anesthesia, contrast dye or any iodine substance.If you’re pregnant or may be pregnant.If you’re going to receive a sedative (medication to keep you relaxed) during the procedure, your provider may tell you not to eat or drink anything for four to eight hours before the test. If
you’re going to be sedated or are receiving general anesthesia, you’ll also need someone else to drive you home after the test.In any case, you’ll receive specific instructions from your provider on how to prepare, including any changes you need to make to your regular medication or eating schedule. Be sure to follow them.What should I expect during
a cerebral angiogram?In general, you can expect the following during a cerebral angiogram:You’ll change into a medical gown.A nurse or radiologic technologist will insert an IV line into a vein in your hand or arm to give you a sedative, if applicable. This will feel like a slight pinch. Some people, especially children and teens, may require general
anesthesia.A nurse or other provider will attach devices to your body to monitor your heart rate and blood pressure throughout the test.You’ll lie on the exam table.A provider will secure your head with a strap, tape or a foam head holder.A provider will sterilize the area of your body where they’ll insert the catheter (a long, thin plastic tube) — usually
in your groin, leg or arm.A provider will numb the area with a local anesthetic injection. This may briefly burn or sting before the area becomes numb.The provider will make a very small skin incision at the site where they’ll insert the catheter.Using imaging guidance, they’ll insert a catheter into an artery through a tiny hole they make with a needle.
You may feel some pressure when this happens, but it shouldn’t hurt.They’ll then guide the catheter through the artery in your body until it reaches an artery in your neck. You won’t feel them guiding the catheter.The provider will then inject the contrast material through the catheter. You may feel warm as the contrast material passes through your
body, but this will quickly pass.When the contrast material reaches the blood vessel(s) that your provider wants to examine, they’ll take several sets of X-rays. You’ll need to stay very still, even holding your breath, during this part so they can get high-quality images.Once they’ve taken enough X-rays, the provider will remove the catheter. They’ll
apply pressure to your artery for a certain amount of time to avoid pooling of blood in the surrounding tissues (hematomas). They may use a closure device to seal the small hole in your artery. A nurse will cover the tiny opening in your skin with a bandage.A provider will remove your IV line.How long does a cerebral angiogram take?A cerebral
angiogram usually takes one to three hours to complete. It may require additional time for exam preparation and post-procedure care.How long is recovery after a cerebral angiogram?After the cerebral angiogram, you’ll remain in a recovery room for observation for a few hours. After this, you’ll be able to go home.Your provider will give you special
instructions for recovery. Be sure to follow them.You can resume your normal eating routine immediately after the exam. You should rest for eight to 12 hours after the test before resuming all other activities.If you’re breastfeeding, you should wait for 24 hours after the contrast material injection before resuming breastfeeding.What are the risks of a
cerebral angiogram?Any procedure that places a catheter inside a blood vessel carries certain risks, including:Damage to the blood vessel, which could cause internal bleeding.Bruising or bleeding at the puncture site.Infection.Other risks of a cerebral angiogram include:An allergic reaction to the contrast material: This is rare. If it happens, your
radiologist will know how to treat the reaction.Kidney damage due to the contrast material if you have diabetes or kidney disease: In most cases, your kidneys will regain their normal function within five to seven days after the test.A blood clot forming around the tip of the catheter: This is rare. If it happens, the clot may block your artery, and your
provider will have to operate to reopen the vessel.Stroke: If the catheter dislodges plaque from a vessel wall, it could block blood flow within your brain, causing a stroke. This is rare — it happens in fewer than 1% of cases.Your provider will go over the risks of the procedure with you before the exam. Don’t hesitate to express your concerns or ask
any questions.