IVC Filter Insertion

A. Interpreter / cultural needs

An Interpreter Service is required? ☐ Yes ☐ No
If Yes, is a qualified Interpreter present? ☐ Yes ☐ No
A Cultural Support Person is required? ☐ Yes ☐ No
If Yes, is a Cultural Support Person present? ☐ Yes ☐ No

B. Procedure

The following will be performed (Doctor/doctor delegate to document – include site and/or side where relevant to the procedure)

An Inferior Vena Cava (IVC) Filter is a small metal, device that is used to catch blood clots.
A filter placed in your IVC assists in stopping any blood clots travelling from your legs or pelvis to your lungs.
IVC filters may be permanent (left in for life) or temporary (left in for a short period of time). This is dependent on your condition and the type of filter inserted.
This procedure will require an injection of a local anaesthetic. Sometimes it will require the use of sedation anaesthetic.

C. Risks of the procedure

In recommending an IVC Filter Insertion, the doctor believes the benefits to you from having this procedure exceed the risks involved.
The risks and complications with this procedure can include but are not limited to the following.

Common risks and complications include:
- Minor pain, bruising and/or infection from the IV cannula. This may require treatment with antibiotics.
- Pain or discomfort at the puncture site. This may require medication.
- Bleeding or bruising may occur. This is usually stopped by applying pressure and/or ice to the puncture site. This is more common if you take Aspirin, Warfarin, Clopidogrel (Plavix and Iscover) or Dipyridamole (Persantin and Asasantin).
- The IVC Filter may not be able to be removed for technical or medical reasons.
- Failure of local anaesthetic which may require a further injection of anaesthetic or a different method of anaesthesia may be used.

Nerve damage, is usually temporary, and should get better over a period of time. Permanent nerve damage is rare.

Less common risks and complications include:
- Infection, requiring antibiotics and further treatment.
- A blood clot at the puncture site may form, disrupting the blood flow from the legs, arms or head. This may require treatment with medications.
- The IVC Filter may fill with blood clots, causing a blockage to the IVC and resulting in swelling of the lower body and legs.
- Small blood clots may still reach the lungs.
- Damage to surrounding structures such as blood vessels, organs and muscles, requiring further treatment.
- An allergy to injected drugs, requiring further treatment.
- The procedure may not be possible due to medical and/or technical reasons.

Rare risks and complications include:
- The IVC Filter may move. This may require surgery to remove.
- An increased lifetime cancer risk due to the exposure to x-rays.
- Seizures and/or cardiac arrest due to local anaesthetic toxicity.
- Death as a result of this procedure is very rare.

If sedation is given extra risks include:
- Faintness or dizziness, especially when you start to move around
- Fall in blood pressure
- Nausea and vomiting
- Weakness
- An existing medical condition getting worse
- Heart and lung problems such as heart attack or vomit in the lungs causing pneumonia. This may require emergency treatment
- Stroke resulting in brain damage.

D. Risks of Iodinated Contrast for patients with renal impairment

Specific Risks of Iodinated Contrast to patient’s identified as having Renal Impairment.
- Giving the Contrast to people with weakened kidneys (renal impairment), can cause further kidney damage, which may in turn cause the kidneys to stop working properly (acute renal failure).
E. Patient consent

I acknowledge that the doctor/doctor delegate has explained the proposed procedure.

I understand;

- the risks and complications, including the risks that are specific to me.
- the sedation/anaesthetic required for this procedure. I understand the risks, including the risks that are specific to me.
- that no guarantee has been made that the procedure will improve my condition even though it has been carried out with due professional care.
- if immediate life-threatening events happen during the procedure, they will be treated based on my discussions with the doctor/doctor delegate or my Acute Resuscitation Plan.
- a doctor/doctor delegate undergoing further training may conduct this procedure.

I have been given the following Patient Information Sheet/s:

- [ ] IV Filter Insertion
- [ ] Iodinated Contrast

I was able to ask questions and raise concerns with the doctor/doctor delegate about the proposed procedure and its risks. My questions and concerns have been discussed and answered to my satisfaction.

I understand I have the right to change my mind at any time including after I have signed this form but, preferably following a discussion with my doctor/doctor delegate.

I understand that image/s or video footage may be recorded as part of and during my procedure and that these image/s or video/s will assist the doctor to provide appropriate treatment.

I understand that Queensland Health may release my relevant de-identified information obtained from this and related procedures for education and training of health professionals.

On the basis of the above statements,
1. What is an IVC Filter?
An Inferior Vena Cava Filter is a small metal device that is used to catch blood clots. The Inferior Vena Cava (IVC) is the main blood vessel in your abdomen that carries blood from your legs back to your heart. A filter placed in your IVC assists in stopping any blood clots travelling from your legs or pelvis to your lungs. The filter is inserted into your IVC by placing a needle and thin plastic tube (catheter) into a vein in your groin or neck.

IVC filters may be permanent (left in for life) or temporary (left in for short period of time). This is dependent on your condition and the type of filter inserted.

Iodinated ‘Contrast’ is used to map your veins so the doctor can place the filter in the correct position. For more information on Iodinated Contrast and the risks involved in its use, please read the Iodinated Contrast Patient Information Sheet. (If you do not have this information sheet please ask for one).

2. Will there be any discomfort, is any anaesthetic needed?
This procedure will require the injection of local anaesthetic. Sometimes it will require the use of a sedation anaesthetic.

3. What is sedation?
Sedation is the use of drugs that give you a ‘sleepy-like’ feeling. It makes you feel very relaxed during a procedure that may be otherwise unpleasant or painful. You may remember some or little about what has occurred during the procedure.

This procedure may only need a light sedation. You need to be able to fully co-operate at times by holding your breath when instructed by the doctor.

Sedation is generally very safe but has a risk with side effects and complications. Whilst these are usually temporary, some of them may cause long-term problems.

The risk to you will depend on:
- whether you have any other illness
- personal factors, such as whether you smoke or are overweight.

4. Preparation for the procedure
The medical imaging department will give you instructions on how to prepare for your procedure.
- You will be told when to have your last meal and drink. This is to make sure your stomach is empty so that if you vomit during the procedure there will be nothing to go into your lungs.
- Please tell the staff if you are or suspect you might be pregnant or are breastfeeding.
- List or bring all your prescribed drugs, those drugs you buy over the counter, herbal remedies and supplements.
- Do not drink any alcohol and stop recreational drugs 24 hours before the procedure as these may alter the affect of the sedation anaesthetic. If you have a drug habit please tell your doctor.

5. During the procedure
A fine needle (IV cannula) will be put into a vein in your arm.

The Radiologist (x-ray doctor) will inject local anaesthetic into the skin. A needle and catheter are inserted into the vein in your groin or neck. Once the catheter is in place the needle is removed.

The catheter is guided through the main blood vessels in your body until it reaches the IVC. You should not be able to feel the catheter inside your body.

X-ray pictures are taken while the Contrast is injected into your IVC.

When the catheter is in the IVC, the filter will be inserted. Once the filter is in place the catheter will be removed. Firm pressure will be put over the area where the catheter went into your skin (puncture site). This allows the veins to seal so you will not bleed.
6. After the procedure
The recovery time varies depending on the insertion site and the sedation given. It can be anywhere between 2 to 4 hours.
The IV cannula will be removed after you have recovered.
Staff will discuss with you what level of activity is suitable after your procedure.

7. What are the risks of this specific procedure?
The risks and complications with this procedure can include but are not limited to the following.

Common risks and complications include:
- Minor pain, bruising and/or infection from the IV cannula. This may require treatment with antibiotics.
- Pain or discomfort at the puncture site. This may require medication.
- Bleeding or bruising may occur. This is usually stopped by applying pressure and/or ice to the puncture site. This is more common if you take Aspirin, Warfarin, Clopidogrel (Plavix and Iscover) or Dipyridamole (Persantin and Asasantin).
- The IVC Filter may not be able to be removed for technical or medical reasons.
- Failure of local anaesthetic which may require a further injection of anaesthetic or a different method of anaesthesia may be used.
- Nerve damage, is usually temporary, and should get better over a period of time. Permanent nerve damage is rare.

Less common risks and complications include:
- Infection, requiring antibiotics and further treatment.
- A blood clot at the puncture site may form, disrupting the blood flow from the legs, arms or head. This may require treatment with medications.
- The IVC Filter may fill with blood clots, causing a blockage to the IVC and resulting in swelling of the lower body and legs.
- Small blood clots may still reach the lungs.
- Damage to surrounding structures such as blood vessels, organs and muscles, requiring further treatment.
- An allergy to injected drugs, requiring further treatment.
- The procedure may not be possible due to medical and/or technical reasons.

Rare risks and complications include:
- The IVC Filter may move. This may require surgery to remove.
- An increased lifetime cancer risk due to the exposure to x-rays.

If sedation is given extra risks include:
- faintness or dizziness, especially when you start to move around
- fall in blood pressure
- nausea and vomiting
- weakness
- an existing medical condition getting worse
- heart and lung problems such as heart attack or vomit in the lungs causing pneumonia. This may require emergency treatment
- stroke resulting in brain damage.

Notes to talk to my doctor/health practitioner about:
1. What is Iodinated Contrast?
The medical imaging procedure your doctor has asked you to have uses iodinated ‘Contrast’ (once called X-ray dye). Contrast is a colourless liquid which includes iodine. Contrast is injected into your blood stream to allow your organs to be seen more clearly on x-rays. Contrast is not a dye. It does not stain the inside of your body. Your doctor needs to use Contrast to be able to get all the information needed to assist with your diagnosis.

This information sheet must be read together with the information sheet of the procedure you are booked for (if you do not have this information sheet please ask for one).

2. During the procedure
When the Contrast is injected you may feel:
- A very warm or ‘flushed’ feeling over your body, this may also make you think you have passed urine. You will not pass urine – it is only a feeling.
- A ‘metallic’ taste or smell may also happen. This usually lasts less than a minute.

3. After the procedure
It is recommended that you drink 2 to 4 glasses of water after your procedure to help flush the Contrast from your body.
Contrast does not affect your ability to carry out normal activities; you should be able to continue with your day as normal.

4. Precautions
Contrast is not suitable for some people; you will be asked a series of questions before it is given to you. Your answers allow staff to identify any risk factors that you may have.
- Please tell the staff if you are or suspect you might be pregnant or are breastfeeding.

Kidney function
- Contrast is removed from your blood by your kidneys through your urine. It is easily removed from the body of people who have normal kidney function.
- Giving Contrast to people with weakened kidneys (renal impairment), can cause further kidney damage, which may in turn cause the kidneys to stop working properly (acute renal failure).
- You may be asked to have a simple blood test to find out the level of their kidney function.

Diabetic Drug interactions - Metformin
(Other Drug names: Avandamet, Diabex, Diaformin, Formet, Glucohexal, Glucomet, Glucophag, Glucovance, Metforbell)

If kidneys suffer damage from the Contrast then the kidneys may not be able to remove Metformin from the body. It is safer to briefly stop taking Metformin when having Contrast. Staff will inform you when to stop and when it is safe to take Metformin again.

Contact your GP to monitor your diabetes if you are told to stop your Metformin.

5. What are the risks of Iodinated Contrast?
The risks and complications with this injection can include but are not limited to the following.

Common risks and complications include:
- No known common risks.

Less common risks and complications include:
- Injected Contrast may leak outside of the blood vessel, under the skin and into the tissue. This may require treatment. In very rare cases, further surgery could be required if the skin breaks down.
- Acute Renal Failure occurs when one or both of your kidneys suddenly stop working. Failure can last for days or weeks. It may take the kidneys a long time to regain their previous level of function and you may require dialysis to filter your blood during this time. There is a risk your kidneys could be permanently damaged. To reduce this risk the smallest possible dose of Contrast will be given.
- The injection may not be possible due to medical and/or technical reasons.

Rare risks and complications include:
- Allergic reactions occur within the first hour with most happening in the first 5 minutes. Late reactions have been known to occur up to a week after the injection.

Note: Allergy to topical iodine and/or seafood does not imply an allergy to iodinated Contrast. The reactions vary from:

Mild – hives, sweating, sneezing, coughing, nausea.
Moderate – wide spread hives, headaches, facial swelling, vomiting, shortness of breath.
Severe – Severe reactions are rare but include: life-threatening heart palpitations, very low blood pressure, throat swelling, fits and/or cardiac arrest.

- Death as a result of iodinated Contrast is very rare.

6. What are the safety issues when you leave the hospital?
Go to your nearest Emergency Department or GP if you become unwell.