

Patient information sheet Transoesophageal Echocardiogram (TOE) and Electrical Cardioversion.

In patients with atrial fibrillation or atrial flutter, sometimes it is beneficial to restore the heart into a regular heart rhythm. This is referred to as a “cardioversion”. In many (though not all) cases this is preceded by a transoesophageal echocardiogram (TOE). This information sheet describes these two procedures.

Transoesophageal Echocardiogram (TOE) involves taking accurate pictures of the heart using a special ultrasound transducer that is passed through the oesophagus (swallowing pipe) and positioned behind the heart. These images are very detailed and allow the heart to be evaluated for the presence of a blood clot. If a blood clot is seen in the heart, a cardioversion is not able to be performed as it would be associated with a risk of stroke. If there is no clot in the heart, an electrical cardioversion can be performed.

Electrical Cardioversion involves delivering an electrical shock through special electrodes applied to the chest in order to correct the heart rhythm.

How is the procedure performed?

The TOE is performed under sedation or under general anaesthesia. The cardioversion is performed under general anaesthesia.

Before the procedure:

You must have nothing to eat or drink at least 6 hours prior. You will be admitted to the hospital on the day of the procedure. You should bring a record of your recent blood tests (INR readings) if you are taking warfarin. A blood sample will also be taken on the day of the procedure to check the INR – if this is not in a safe range, the procedure may need to be postponed. A drip will be inserted into your hand or arm.

During the procedure:

Dentures are removed just prior to the procedure. A local anaesthetic is sprayed to the back of the throat. Sedative medications are administered to make you drowsy/anaesthetised. The doctor will place the TOE tube to the back of your throat and ask you to swallow (this is the most difficult part). Once the TOE tube is in place, the doctor will take pictures of the heart.

If a clot is found in the heart, no further procedures will be performed on the day.

If there is no clot in the heart, the electrical cardioversion will be performed. For this part, you will be fully anaesthetised. Once you are fully unconscious, an electrical shock(s) will be applied through special adhesive pads.

Risks from a TOE examination

Most patients do not have any major complications. It is quite common to experience a sore throat for a day or two, and this is usually not serious. The risk of major complications is small but can include: Injury to the throat or oesophagus, aspiration (inhalation of secretions into the lungs causing pneumonia), risks of sedation (depressed breathing, allergic reactions, low blood pressure) and others.

Risks from the Electrical Cardioversion

This is usually a safe procedure. Minor skin irritation and chest discomfort can be felt after the procedure. Serious complications are not common but can include: stroke, severe slowing of the heart rate requiring pacemaker, skin burns, risks from anaesthesia and others.

After the procedure:

You will wake up very soon after the procedure, and will be told if the procedure was successful. Some patients notice minor skin irritation to the chest wall after the procedure. This usually settles in a few days. Soothing cream can be applied to this. It is not uncommon for patients to experience a sore throat from the TOE tube after the procedure. You will be under observation for a minimum of 4 hours and then usually discharged home the same day. **You are not allowed to drive yourself home.** Please ensure someone else takes you home. You will need to continue your regular medications unless specified