

Head and Neck

Robotic Assisted Head and Neck Surgery

University Hospital Coventry has recently introduced robotic surgery for some patients and this leaflet describes the use of this type of surgery in the head and neck area. It outlines the risks and benefits for patients and will help to answer any further questions that you may have about the technique.

What is robot-assisted surgery?

Robotic-assisted surgery is a technique that uses a robotic console (the DaVinci® system) to help your surgeon during the operation. The surgeon and assistant will still be in the same room as you, performing the operation by controlling the robot's arms. It is important to understand that the robot is not performing the surgery and cannot 'perform' the surgery on its own. The surgeon still carries out the procedure, but the robotic console allows more controlled and precise movements during the operation.

Who is eligible for a robotic-assisted procedure?

Patients requiring removal of tissue in the tonsil and tongue base areas are particularly suitable. The robot can also be used in selected patients for surgery around the larynx (voice box) and for thyroid surgery.

Why should I have a robotic-assisted procedure?

Although your surgeon and the surgical team will have an idea of your diagnosis, it is important that the laboratory has a piece of tissue from the area that the surgeon thinks may be the cause of your symptoms. This means they are able to get a definitive diagnosis and decide what kind of treatment (if any) is required.



Patient Information

A major advantage of robotic-assisted surgery is that the robot uses a telescope, which allows a much clearer view of the back of the tongue, larynx and oropharynx than the human eye. The view is also magnified and in 3D. This allows precise surgical removal of tissue and a better view of any bleeding vessels, meaning that the bleeding can be stopped in good time.

For some patients, the use of the robot will mean that they do not have any visible scarring in the neck as a result of the procedure as the surgery can be performed through the mouth or through small cut away from the neck area.

Do I have to have robotic assisted-surgery?

It is possible for some patients to have their procedures carried out without the robot. Some patients will require a different kind of treatment if they choose not to have robotic assisted surgery. Your surgeon will be able to discuss the specific options in your situation.

What are the disadvantages of having the operation robotically?

Your surgery may be slower and you will need to be anaesthetised for a longer amount of time. This is because the robot takes time to set up and may be slower than conventional surgery.

In some cases, the surgeon may feel that it is better not to use the robot for the operation. If there is a risk of this happening your surgeon will discuss what options will be available to you before your procedure starts.

Are there any complications to robotic assisted-surgery?

The main complications are:

- Bleeding
- Pain on swallowing
- Swelling
- Infection
- Limited mouth opening

Patient Information

These risks apply to all surgical procedures around the jaws, not just robotic assisted-surgery.

Tooth injury: To carry out surgery at the back of the throat an instrument is placed in the mouth to keep it open. Rarely, a tooth may be injured by this instrument. The risk is much higher if a tooth is loose or decayed before surgery. Both your surgeon and the anaesthetist will check if you have loose teeth and warn you of this risk.

Who will carry out the surgery?

Your robotic-assisted surgery will be carried out by one of our consultant head and neck surgeons with specialist training in this procedure. Although carrying out this specific procedure using the robot is new to the Trust the DaVinci® system has been used in over 1.5million procedures worldwide.

What happens during the operation?

The procedure will be carried out under general anaesthetic (you will be asleep for the operation). The surgeon and the assistant will place the arms on the robot in the position you are and use the console to control the arms and camera system to remove the tissue from the throat. The procedure usually takes around one hour but the anaesthetic and recovery time mean that you will be away from the ward for longer than this.

What happens afterwards?

There are no special steps in your recovery as a result of having robotic-assisted surgery and for some patients recovery is quicker. The length of time you spend on the ward will depend on the type of procedure you require. Your surgeon will explain this to you before you agree to the procedure.

What happens if I have problems after I return home?

You will be given some instructions about what to do if you have a problem when you leave the ward and information will also be sent to your GP.

Patient Information

If you experience any of the following, please contact your GP:

- Increasing pain
- Worsening swallowing problems
- Bleeding
- Fever (temperature higher than 37.5°C).

Will I have a follow-up appointment?

Your consultant would normally arrange an appointment a week or so after your surgery to discuss your results and check that you have recovered from your procedure.

Further Information

For more information, talk to your surgical team or visit www.DaVinciSurgery.com. Alternatively, contact the Head and Neck Services medical secretaries on 024 7696 5685.

The Trust has access to interpreting and translation services. If you need this information in another language or format please ask and we will do our best to meet your needs.

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