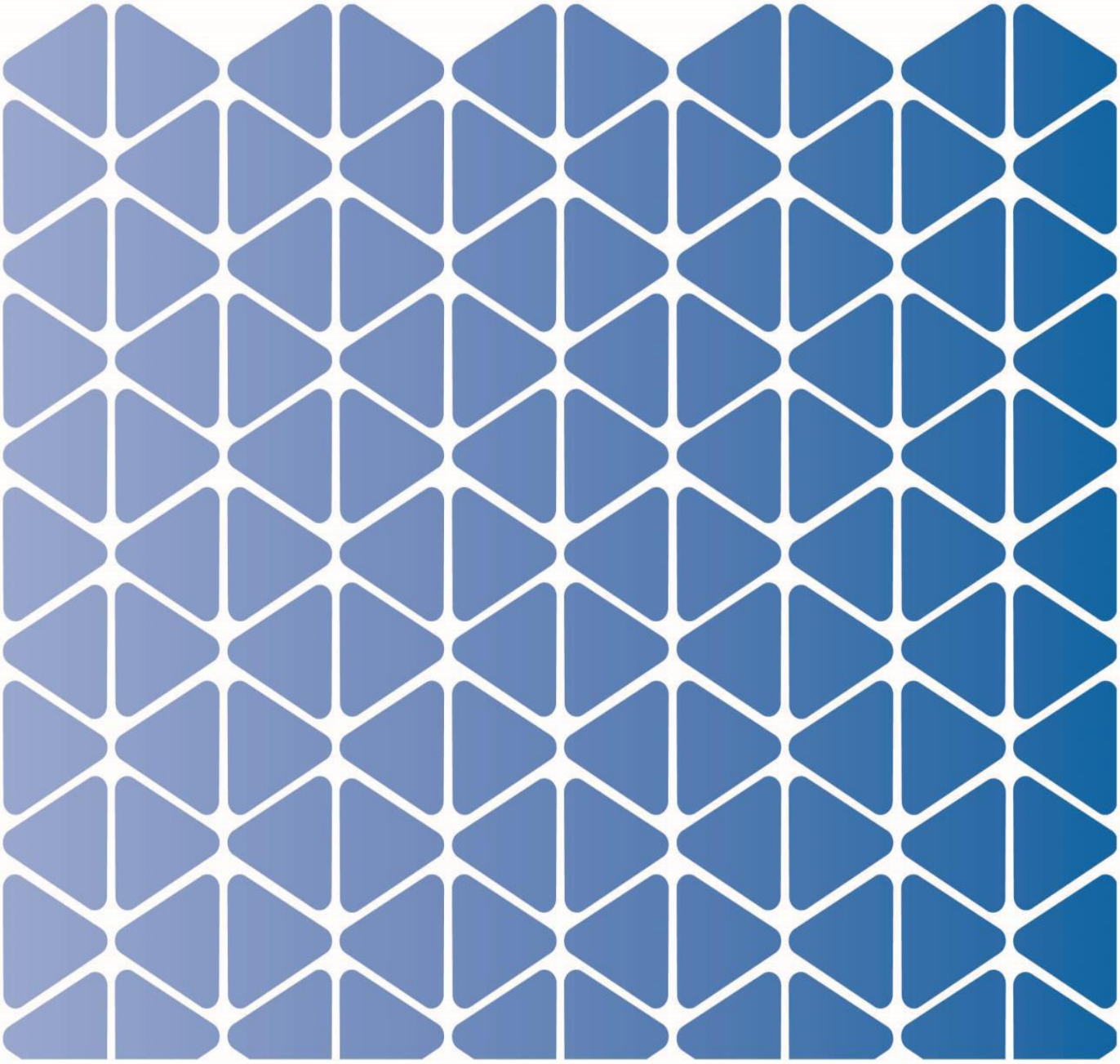
NHS
Worcestershire Acute Hospitals NHS Trust

PATIENT INFORMATION

Robotic Assisted Surgery in Gynaecology

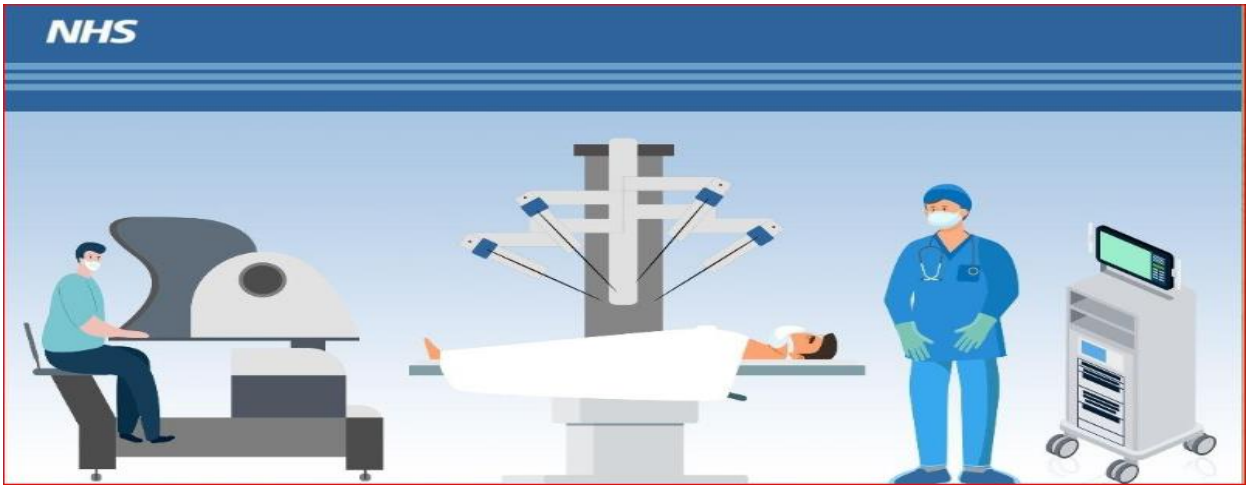


What is Robotic surgery?

Robotic surgery is a type of minimally invasive surgery where small incisions are made in the abdomen and surgery is performed with robotically controlled instruments.

What is the ‘Robot’?

The ‘robot’ is positioned beside the patient. Small incisions are made in the abdominal wall (4 or 5) where ports are placed manually by the surgeon. The ports allow the camera and instruments to be safely inserted into the abdomen, these are then attached to the arms of the robot. The movements of the camera and instruments are controlled by a trained robotic surgeon who sits at the console. The console has a 3-D high-definition viewing channel connected to the camera inside the patient. The controls within the console allow the surgeon to precisely move the camera and the surgical instruments to conduct the surgery. There is a surgical assistant positioned next to the patient to help the surgeon perform the surgery.



What are the advantages of Robotic surgery?

Robotic instruments have a wider range of movement than the human hand and the instruments used at standard keyhole (laparoscopic) surgery.
Delicate and precise movements of the surgeon’s hands and fingers are translated to movements of the instruments within the body. At standard laparoscopic surgery the instruments are moved by the surgeon directly outside the patient’s body.
Robotic surgery is less tiring for the surgeon, especially for longer and complex surgical procedures. Surgical tremor is eliminated and the vision is enhanced through a 3D high-definition camera system.

Advantages of minimal access surgery (small incisions) are maintained so that recovery is quicker, less postoperative pain, blood loss is reduced and length of patient hospital stay is shorter.

When is robotic surgery used in Gynecology?

1. Endometriosis
2. Cancer (and pre-cancer) of the uterus or cervix
3. Hysterectomy for other conditions
4. Ovarian conditions such as large cysts
5. Pelvic floor surgery
6. Patient with high Body Mass Index (BMI)

Robotic surgery is usually reserved for more complex conditions such as for large uteri requiring hysterectomy, for complex or severe cases of endometriosis involving other structures or organs (e.g. bowel, bladder, ureters), and where the patient has medical conditions or raised BMI which may make open or laparoscopic surgery more challenging. In a few cases the availability of robotic surgery means that surgery is now possible when it would otherwise have been deemed too challenging either open or laparoscopically. Robotic surgery in these instances allows shorter procedure time, associated with less risk to the patient and better outcome in terms of quality of life.

Your surgeon will provide information about the conditions listed above.

Is Robotic surgery safe?

Yes. There is lots of evidence that demonstrates robotic surgery is safe and effective.

- Robot-assisted surgery has been shown to reduce the length of hospital stay compared with open hysterectomy and laparoscopic hysterectomy.
- There is a reduced blood loss and rate of blood transfusion with robotic-assisted surgery, compared with open hysterectomy.
- Robotic surgery is associated with a lower postoperative pain score compared with patients undergoing laparoscopic surgery.
- Robotic-assisted surgery may benefit patients with a high BMI, in whom open surgery is associated with higher surgical morbidity and conventional laparoscopic surgery is likely to be technically challenging. In patients with a BMI ≥40 kg/m2, hospital length of stay is reported to be shorter with reduced blood loss from surgery.

How long does it take to recover from Robotic surgery?

Most patients can be discharged on the day of surgery. Some may require a short stay depending on the indication and complexity of the surgery performed, and other medical conditions. Your surgeon will discuss this with you prior to surgery.

Can I choose not to have robotic surgery?

Yes. It is important to discuss any concerns you have with your surgeon who can fully discuss all the risks and benefits of robotic-assisted surgery as well as discuss the other potential surgical and non-surgical options available.

References:

1. NWHN. (2018). Hysterectomy – NWHN. [Online] Available at: https://www.nwhn.org/hysterectomy

2. Robot-Assisted Surgery Compared with Open Surgery and Laparoscopic Surgery: Clinical Effectiveness and Economic Analyses. https://pubmed.ncbi.nlm.nih.gov/24175355/

3. Multicenter analysis comparing robotic, open, laparoscopic, and vaginal hysterectomies performed by high-volume surgeons for benign indications. https://pubmed.ncbi.nlm.nih.gov/26952352/

4. Robot-Assisted Laparoscopic Hysterectomy vs Traditional Laparoscopic Hysterectomy: Five Metaanalyses. https://www.ncbi.nlm.nih.gov/PubMed/22024259

5. Comparison of Robotic-Assisted Hysterectomy to Other Minimally Invasive Approaches. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3558889/

6. Robotic surgery vs laparoscopy surgery in patients with diagnosis of endometriosis: a systemic review and meta-analysis - https://link.springer.com/article/10.1007/s11701-020-01061-y

7. NHS website https://www.nhs.uk/conditions/pelvic-organ-prolapse/

8. Journal of minimal access surgery. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4290126/

9. Impact of Robotic Platforms on Surgical Approach and Costs in the Management of Morbidly Obese Patients with Newly Diagnosed Uterine Cancer https://link.springer.com/article/10.1245/s10434-015-5062-6

10. Laparoscopic versus robotic hysterectomy in obese and extremely obese patients with endometrial cancer: a multi-institutional analysis https://www.sciencedirect.com/science/article/abs/pii/S0748798318312964

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.