In this short presentation, we aim to give you a practical guide to the three most commonly used surgical positions in obstetrics and gynaecology — Lithotomy, Trendelenburg and Lloyd-Davies.
Optimal surgical positioning is very important and needs to balance the need for good surgical access with the minimum risks to the patient such as haemodynamic instability, impaired ventilation or musculoskeletal injury.

Different positions are necessary for different surgical procedures and it is important to know not only the correct position but the advantages and disadvantages of that used.

In most instances in theatre the patient will be under spinal or general anaesthesia. Before moving any patient the anaesthetist must be informed and often movements will only be under their specific direction.

Always be aware of health and safety and the need to avoid injury to staff when positioning patients – particularly obese and pregnant patients. In most instances a minimum of five people will be necessary to safely position a patient - the anaesthetist at the head and two people on either side of the patient.
Lithotomy position is one of the most commonly used in obstetrics and gynaecology. It is used in childbirth, instrumental delivery, perineal, vaginal and urological surgery.

Lithotomy position is defined as supine position of the body with the legs separated, flexed and supported in raised stirrups.
As seen in this photo, start with the patient lying supine on the bed. As always check with the anaesthetist before commencing any movement and only after the designated team leader has said ‘Ready, Steady, Move’.
Move the patient down the table until the buttocks lie just beyond the edge of the lower table break – as you can see in this photo the bottom end of the table has been removed at the break. If the buttocks are not positioned just beyond the table break it will be difficult to operate and, for example, insert a sim's speculum. However, if the buttocks are too far beyond the table break they will overhang and there is a risk of the patient slipping.
Once the buttocks are positioned optimally, elevate both legs simultaneously and place in support boots as seen here - this avoids dislocation of the hip joint, minimises risks to the other extremity, helps avoid rotational stress on the lumbar spine and maintains the limbs in a symmetrical arrangement.
The angle of flexion and external rotation will depend on the procedure being performed and can be adjusted using the handles seen here in the photo. When the procedure has finished follow the same steps in reverse always remembering to move both legs simultaneously and symmetrically.
Trendelenburg position is commonly used in laparoscopic surgery and open abdominal surgery.

Trendelenburg position was initially described as the torso supine and the legs upon the shoulders of an assistant, however, the term is now often used to describe any head-down position – classically a 45° head-down tilt. It aids the surgeons view by using gravity to move abdominal viscera superiorly, however, this can severely limit diaphragmatic movement and increase ventilation/perfusion mismatch and raise intracranial pressure.
Start with the patient lying supine on the bed as shown. As always check with the anaesthetist before commencing any movement and specifically check that they are happy for head down tilt. Always check the maximum angle with the anaesthetist before-hand but be wary that this may change during the procedure for example if there are ventilator difficulties.
Gradually tilt the table in head down position to required angle.

When the procedure has finished follow the same steps in reverse in order to revert to the supine position.
Lloyd Davis position is used in pelvic and rectal surgery where access is required from both abdominal and perineal aspects.

Lloyd Davis position is also known as ‘Trendelenburg with legs apart’ or ‘head-down lithotomy’.

Lloyd Davis position is defined as supine position of the body with hips flexed at 15° as the basic angle and a 30° head-down tilt.

Lloyd Davis position is used in pelvic and rectal surgery where access is required from both abdominal and perineal aspects.

Lloyd Davis position is also known as Trendelenburg position with legs apart or head down Lithotomy. It is defined as supine position of the body with hips flexed at 15° as the basic angle and with a 30° head-down tilt. The key difference between lithotomy and Lloyd-Davies is the degree of hip and knee flexion.
As always start with the patient lying supine on the bed and check with the anaesthetist before commencing any movement. As in the lithotomy position, move the patient down the table until the buttocks lie just beyond the edge of the lower table break. Elevate both legs simultaneously and place in support boots. The hips should be flexed at 15° as shown above.
Once the legs are secured gradually tilt the table in a head down position to 30° as shown. When the procedure has finished follow the same steps in reverse. Remember to firstly reverse the tilt and then to move both legs simultaneously and symmetrically out of the boots and back to the supine position.
We hope you have found this short presentation useful and have a greater understanding of the different surgical positions used in obstetrics and gynaecology.