

# NF14003

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I had the opportunity to attend IRCAD/EITS course Advanced Techniques in Gynecological Laparoscopy, which took place in Strasbourg, France from 24th to 26th March 2014. The course was held at the IRCAD training center for minimally invasive surgery. The course selection at the training center covers nearly all fields in medicine that use endoscopy as diagnostic or operational tool.

At our course there were 37 participants of 22 nationalities. We were organized in pairs based on laparoscopic experience which we announced beforehand. These pairs worked together in training laboratory.

The three-day course consisted of theoretical sessions which concentrated on laparoscopy techniques. Lecturers who were institution staff or younger fellows of the institute used a lot of laparoscopy videos in their presentations which is great when it comes to surgery technique. Every day we got to see live-surgery performed by Professor Arnaud Wattiez who was the head of the course. We saw a hysterectomy which was difficult due to large fibromas and two cases of severe endometriosis.

In the first endometriosis operation the patient had large deep nodule of endometriosis infiltrating rectum and spreading laterally to the pelvic wall. The operation was good example of the attempt to spare the hypogastric nerves at the level of a large nodule. We saw the nerves go straight to the nodule and had to be removed with it. "There is no such thing as nerve sparing in endometriosis surgery" as professor Wattiez said. When there are lesions and involvement of the nerves on both sides of the pelvis, one may have to consider leaving the less affected side untouched. Otherwise there is too strong risk for impairment of bladder and sexual function.

The other live-surgery for endometriosis was a severe case with adomyosis. The patient had given her consent for hysterectomy but since she did not have children the professor wanted

to save the uterus. The surgical treatment of adenomyosis, other than hysterectomy, remains controversial as we learned from the lecture by professor Setubal from Portugal. Conservative treatment with different preparations such as GnRH agonists, progestins, Mirena etc. may subdue the symptoms but do not cure the condition. The problem with removing the adenomyosis is that there is no capsule or clear margins. In order to save the uterus professor Wattiez did resection of the adenomyotic tissue. He pointed that this is purely experimental surgery and there is no evidence to support this kind of surgery.

The best part of the course was the possibility to train with live-tissue in the laboratory. After the theoretical lecture of the crucial points of laparoscopic suturing by Dr Hernandez from Venezuela we started the training by cutting and suturing chicken legs. In order to achieve "the perfect stitch" the needleholder which carries the needle must be parallel to the defect. There are many tips and tricks to load the needle into the right position on the needleholder but for the perfect stitch it needs to be perpendicular to the defect. When these points are taken care of, all one needs to do to stitch is to rotate one's wrist.

With the chicken legs we trained both intracorporeal and extracorporeal knots. I am more accustomed to use extracorporeal knots. Thus the most valuable lesson for me was the "Gladiator rule" when tying intracorporeal knots. When applying this rule one manages almost all circumstances. It includes staying close to the homebase which means the spot where the knot is supposed to be, keeping the thread horizontal and guarding or killing when making the loops with the thread. The term "Gladiator rule" comes from the hand gestures of Roman emperors when they gave instruction on how to treat the gladiators.

Two afternoons we trained in the lab with pigs that were put to sleep and were on ventilators. We introduced the trocars and suspended the bladder. We made bladder lesions to train suturing techniques in order to repair the lesions. We performed hysterectomy and after that we trained dissection of pelvic side wall by performing lymphadenectomy. We also did ureterolysis and then cut the ureter, inserted a small tube into the ureter and then sutured the ureter back together. We dissected all the way to the kidney and performed nephrectomy. Repair of bowel injury was also trained.

The lectures covered the basic principles of laparoscopy. The most important ones to remember according to professor Wattiez are: follow the bubbles, use divergent forces and do not irrigate. When we have gas in the peritoneal cavity and we dissect the retroperitoneal space, the gas expands the space. The gas gives the right direction to follow. If we use water to rinse the surfaces, the tissue becomes oedemic and we can no longer follow the bubble and the anatomy is lost. When dissecting we should use two hands and stretch with the instruments to get space. The knowledge of anatomy and your instruments such as the source of power are of utmost importance. We got useful lectures on laparoscopic anatomy from Dr Fernandez, Brazil and on different energy sources in laparoscopy from Dr Meza Paul from Venezuela.

The clinical situations that were covered in the lectures were myomectomy, hysterectomy, ovarian cysts, deep endometriosis, adenomyosis, laparoscopy in fertility sparing and in pelvic organ prolapse repair and also in gynecological oncology. The complications and their management were also covered such as bowel, urinary tract and vessel injuries.

The course was very well organized and all the settings and facilities were excellent. The hotel was located 50 meters from the course center. Over the course dinner I had the opportunity to discuss different topics with the course director Prof Wattiez.