

Report for NFOG visitor programme.
Helsinki University Hospital
March 26th to 30th 2007

June 25th 2007

The aim of my stay at Helsinki University Hospital, gynaecological Department was to study surgical procedures in relation to fertility patients and to get knowledge of the factors responsible for the famous results of the freezing programme in the fertility Clinic.

Monday March the 26th.

I arrived at Helsinki March the 25th and I found my way to the University Hospital of Helsinki, Kvinnoklinikken the following day, where I was kindly received by dr.Paivi Härkki.

The department is located in a large university area. It is divided into sections of perinatology, oncology, endocrinology including fertility and general gynaecology.
The department handles around 4000 deliveries a year.

On this first day I participated in the poliklinik (ambulatory), mainly patients with or suspected for endometriosis. One of the most difficult problems to face was that some of the patients did not attend their appointments to the clinic, a problem we also meet with increasing frequency in Denmark.

Hereafter I had the opportunity to assist dr. Jyrki Jalkanen in a laparoscopic hysterectomy for a patient with multiple fibroids.

Dr. Jalkanen showed me the statistics regarding the distribution of the operative methods in the way of performing hysterectomy during the past 4 years in the gynaecological dept. of Helsinki University Hospital. It is reflected in the table shown below:

Hysterectomy by	2006	2005	2004	2003
Laparotomy	129	176	171	307
Laparoscopy	273	251	287	295
Vaginal +prolapse	27	29	29	35
Vaginal -prolapse	60	59	31	45

Tuesday March the 27th.

This day started with a laparoscopic procedure for endometriosis. 45 year old female with two years history of moderate pelvic pain. We found some dense adhesions from the bowel to the abdominal wall, an endometrioma 2 cm in diameter located to the left ovary and a smaller 0,5 cm endometrioma in the right ovary. Small endometriotic lesions in the Douglas Pouch. The ovarian endometrioma was opened, the cyst wall stripped off and the ovarian bed electrocoagulated. The mucosa in the Douglas pouch was el-coagulated and the cysts extracted via the 10 mm trocar port. The 10 mm port was closed with the help of a tiny fascia closing device from Storz instruments. Skin closed intracutaneously. The pictures show the two endometriomas and the Douglas Pouch after coagulation.

The second operation was a 34 year old woman who has given birth to one child, she was now bothered with frequent voidings at night-time and suspected for a uterine fibroma. She has had a levonova (mirena) intrauterine device for 5 years. At first, the impression was she had a subserous fibroma, but on laparoscopy she revealed an intraligamentous located large fibroma. The procedure involved el-coagulation to deliberate the fibroma from its blood supply and thereafter morcellation with a Morcellex rotating device, cutting the fibroma into sausage-like tissue pieces, which thereafter could be extracted via a 15 mm port.

The third operation involved a 54 year old female with uterine adenomatous hyperplasia undergoing laparoscopic hysterectomy. Stepwise el-coagulation of ovarian vessels/infundibulopelvic ligament, round ligament and uterine vessels, the uterus side-positioned to expose vessels and avoid ureteral damage. It was a moderate troublesome operation due to patient obesity. The vagina cut opened on the cervical level and the uterus extracted vaginally. The hemostasis viewed and supplied by laparoscopy. We discussed the importance of avoiding ureteral damage, which has been successfully reduced to an incidence of 0,2 % nationwide in Finland.

Wednesday March the 28th

This day I had the opportunity to visit the local fertility clinic. It is the oldest fertility clinic in Finland. The first IVF baby born May the 1st 1984 (a boy). They now yield 400 IVF cycles a year. The head of the department is dr. Aila Tittinen which together with biologist Cristal Hyden-Granskog have made an important contribution to the concept of elective single embryo transfer. I was shown some of the departments procedures by staff specialist dr. Mervi Haltunen. Some of the differences in the clinical handling compared to Hvidovre Hospital Fertility Clinic was that they almost entirely used the long protocol with GnRH agonist for ovulation induction, no flushing of follicles, no use of local anaesthetics by OPU and no antibiotics for profylaxis (which also seems to be without evidence from randomised trails). They have an average of 12 oocytes picked up per patient. They used a rather handsome transfer catheter (Sydney Cook with an echogenic angled tip and a little distal bubble, which seemed to be easy to handle and apply smoothly). The preferred medication for ovulation induction was recombinant FSH. They started progesterone supplementation the day after embryo transfer.

Biologist Cristal Hyden-Granskog could explain that the clinic in 1998 changed the freeze method from DMSO to propandiol and has not made any further changes since that time. The pregnancy rate in the year 2003 and in the beginning of 2004 was an impressive 40 % but has declined to a more international level of 28 % now without any obvious reason. They have a mean number of 1.2 embryos transferred per patient with no difference between fresh and frozen cycles.

In the afternoon I assisted dr. Jyrki Jalkanen in two laparoscopic hysterectomies, which went straight-forward. One patient with menorrhagia and one patient with pain. In a telegramme style, the procedures were securing the uterosacral, infundibulopelvic, round and broad ligaments, the uterine vessels, bladder freeing, vaginal opening, uterine extraction, supplying hemostasis and closure.

Thursday March the 29th

On this day I assisted the head of department dr. Jari Sjöberg in a laparoscopic hysterectomy.

Dr. Sjöberg is very experienced in the procedure, which has been routine in the department since early 1990's. It is now common to introduce the doctors under specialization in gynaecology in this surgical procedure. It was emphasized that the surgery should start with securing the uterosacral ligaments and end with the closing of vagina in a vertical direction. The details in the operation is stated above. It was impressive to watch the expedite way of operating by dr. Sjöberg.

Later on this day I regarded dr. Paivi Pakarinen performing a laparoscopic lymphadenectomy and subsequent hysterectomy in a 64 year old patient with adenocarcinoma of the uterus who presented with postmenopausal bleeding. It was an interesting dissection of the nodes near the iliac vessels and obturatorian fossa.

This days last operation was also a laparoscopic aided hysterectomy on a medium sized uterus, helpful to see the procedure repeated for educational purpose.

Friday March the 30th.

First I assisted dr. Jari Sjöberg with a patient with endometriosis located to the uterosacral ligaments and an endometrioma in the left ovary. The ligaments were resected by electro-scissors, the ovary was opened and the cyst stripped off, the specimens extracted via port.

Dr. Sjöberg was so kind to give me a CD-ROM with a presentation of endometriosis examples, as he is very experienced in this topic.

Thereafter I watched a hysteroscopy in a patient with IUD (Mirena).

Around noon I participated in the Fertility Clinic conference, where we discussed the use of microdroplets for IVF and the next weeks patients.

Lastly I assisted dr. Härkki in a laparoscopy in a patient with an ectopic pregnancy, the procedure performed was a tubotomy.

Conclusion:

I had a very profitable stay at the University Hospital of Helsinki, gynaecological department, during the week I had the opportunity to participate in several laparoscopic operations with the benefits of repetition for increasing the learning. Moreover it was nice to experience the methods and procedures in the Fertility Clinic. Special thanks to dr. Paivi Härkki for arranging the stay and the kind reception, to the doctors Sjöberg, Jalkanen, Pakarinen for their patience and kindness and the young doctor Kirsi Palva and medical student Stefan Lönnberg. Also thanks to the helpful nurses in the operating theatres and the staff in the fertility clinic.

With kind regards

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