THL and Infertility Patients

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Dr. Perloe: "I'm here with Professor Stephen Gordts at the Satellite Symposium for Circon. Thank you for your presentation here, this was an excellent opportunity to see how a transvaginal hydrolaparoscopy can benefit our infertility patients. Can you tell us a little bit about how the procedure was developed?"

Professor Gordts: "It was that we were concerned of the problems we sometimes have with diagnostic standard laparoscopy, and we put a few things together. We know that by with vaginal access, you are very close to the ovaries and the tubes; we know from data we observed from our own experience that with flotation you could have a good visualization of small lesions; and the refinement of small endoscopes. So we put these three things together, and we came to the transvaginal hydrolaparoscopy. We have a lot of experience by doing conventional procedures, and all gynecologists who are doing in vitro fertilization have that experience of aspiration of the follicles by ultrasound guided visualization. So we know from experience with ultrasound that the ovaries and tubes are lying there and are nearby."

"Some physicians would say that this is nothing more than culdoscopy which we used to do. How would this differ, and why is this new technology?"

"It's a little bit - let's call it a revival of culdoscopy - but you cannot compare it with culdoscopy where there are two things that are different. First of all, the patient here is lying in a normal gynecological position; by the time culdoscopy was performed, it was a knee chest position which was uncomfortable for the patient and awkward for the gynecologist. Secondly, all these procedures were done under general anesthesia at the time, plus the instruments were much larger than we can use now, and as a distention medium at culdoscopy, they use the CO2 gas, and we are using saline solution which makes a lot of difference. So except for the vaginal access, the setting we have now is different from culdoscopy."

"Certainly the use of saline in the cul-de-sac will be better tolerated by the patients than carbon dioxide in an office based laparoscopic procedure, and the videos looking at the ovaries showed the increased sensitivity. I was also impressed by the fallopian pictures that you had ...

"Salpingoscopy."

"Salpingoscopy. Is that something that is easily done on a majority of patients, or is it the rare case where ...."

"No, it's not the rare case. From the attempted tubes where we attempted to do a salpingoscopy, we succeeded in about 65%. So it's not so difficult to perform, there are certain numbers of tubes where the direction of the scope and the action of the tubes would be impossible to do it without extra manipulation, but in about 65% we did succeed. The procedure is best performed by doing the salpingoscopy at random moment of ovulation because at that moment the tubes are very congested and the tube lumen is open then to canalization."
Dr. Perloe: "That brings up a good point. Normally when we've been doing laparoscopies, we like to do them in early follicular phase, and here you mention that there's an advantage to go around the time of mid-cycle."

Professor Gordts: "Yes, I think it's because with the transvaginal access we can visualize the tubes and the ovaries in their normal condition, so we will have here an instrument which permits us to do examination of tubes and ovary at random moment of ovulation - where at this moment, we do not know what really happened there."

"The video shows the approximation of the fimbria at the ovary and a movement, and it's very dramatic. One wonders whether there will be cases where you have normal appearing anatomy but there's a functional deficit in approximation that you'll be able to pick up. I look forward to seeing data on that. Can you review the indications and contraindications to this procedure?"

"This procedure is done in patients without obvious pelvic pathology which means that these are patients with a problem of infertility, where their vaginal examination is normal, where vaginal sounds are normal, and where you have no indications of obliteration of the vestibular glands. So that's all the contraindications."

"Are there patients then, who come in with the complaint of infertility where you will go directly to laparoscopy without proceeding?"

"Sure, I think transvaginal laparoscopy is not intended to replace the standard laparoscopy. When you see a patient and she has pathology at vaginal examination and/or at vaginal ultrasound, then the technique of operative laparoscopy is indicated. Transvaginal hydrolaparoscopy is at this moment only a diagnostic tool."

"If you have a patient with a low suspicion of an abnormality, confirming that with this procedure in an office setting might allow you to complete the evaluation sooner? Has your data shown that?"

"Yes, so this procedure is now used by us as a first line diagnostic procedure in the workup of infertility. Like a lot of gynecologists that are initially doing hysterosalpingography - we are performing this procedure in the first line."

"Do you think then that some of your patients have been able to move ahead sooner and avoid a standard laparoscopy because of the information?"

"Yes, as you see in the follow-up of one year of the patients which responded, of this 100 patients - 30 patients are already pregnant. So we have got a very early accurate diagnosis and an accurate treatment."

"Were there some patients that you might have gone on to treat without, had you not had this information, where you might have treated, where in retrospect you found out with the procedure that they really should have been having a surgical procedure earlier? In other words, did you have patients who underwent an earlier operative laparoscopy because of the information you gained here?"

"Yes, in the group of patients here, we performed on about 25% of these patients an operative laparoscopy from the information gained from the transvaginal hydrolaparoscopy."
"The Canadian study suggests that treatment of mild endometriosis may be valuable in improving fertility rates; now there's some issues with the low pregnancy rates in the control group in that study. If you find minimal endometriosis at the time of THL - do you believe with the data we have now, those patients warrant an operative procedure to treat it?"

"I think it's a good question. It's not so easy to answer because it is difficult to know what evolution will be of these small implants of endometriosis on a spontaneous basis. So at this moment, when it's only small spots of endometriosis, we will not do an operative procedure even to re-evaluate the patient after 6 or 8 months time."

"The other interesting finding was normally we think of as adhesions sticking two structures together, and you showed data about floating adhesions. Can you tell us a little bit more about that?"

"We just thought that with the transvaginal hydrolaparoscopy we can see these adhesions at normal laparoscopy, so at this moment we don't know what the exact meaning of these adhesions are. As you have seen the mechanism is more of both sides pick-up. How the fimbriae pick them out of the follicle? So I can imagine that these adhesions can interfere with the release of the oocyte and pick-up of the oocyte out of the follicle. We have to evaluate and just see what's the meaning of these adhesions. Are these adhesions the beginning of endometriosis or not? So we must make some biopsies and just see what it will bring."

"Where do you think this technique is going to take us? What kind of research will we see coming out that we can look forward to learning more?"

"Certainly the post-ovulation, the pathology of the site release and on the site pick-up - I'm sure that we have a lot to learn about that. Secondly, concerning endometriosis - what is the spontaneous evolution of small lesions of endometriosis, will they stay like that, will they disappear, will they become bigger or not? Evaluation of the effect of treatment on diseases like endometriosis for instance, and very carefully I'd like to say, maybe in the screening of ovarian cancer there is a possibility for this technique but that would be done in a prospective way so that we must collect data to see what's coming out, it's too early to give."

"Do you anticipate the development of biopsy instruments or therapeutic instrumentation that ...."

"We will have in a few months time, fine instruments for taking biopsies, and eventually for doing small lysis of adhesions and things like that. No big surgery, for that the operative laparoscopy is there, but for smaller adhesions, biopsies, things like that that will be in the hospital."

"Anything else you want to tell other physicians about this so that those who haven't been at the meeting can understand our enthusiasm about the new technique?"

"If they would like to do this procedure, they can go to people who are performing this procedure in the world already and have some experience. I think it's very important that before they go in the office, they first have to perform some procedures under general anesthesia at the moment the patient is scheduled for an operative diagnostic laparoscopy, so that these gynecologists can become familiar with the view and with the technique of the THL."

"Thank you so much, Dr. Gordts."

"It's my pleasure."