Literature Review

Early Experience of Laparoscopic Radical Hysterectomy and Lymphadenectomy

(Pengalaman awal pada Radikal Histerektomi dan Limfadenoktomi per Laparoskopi)

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I have had a basic laparoscopy skill during my residency in the Department of Obstetrics and Gynecology University of Indonesia back in 1974. At that time this procedure only for diagnostic purpose especially to determine the patency of the fallopian tube. Time goes on and laparoscopy now becomes very popular surgical procedure as a minimal invasive surgery in almost all of the surgical procedure not only in gynecologic field but also has expanded to digestive surgery, orthopedic, ENT, thorax surgery. Prof. Joo-Hyun Nam, MD (Prof. Nam) from Korea suggested me to develop this kind of surgery. Gynecologic oncologist should have competency for doing this minimal invasive surgery such radical surgery in cervical cancer, endometrium and early ovarian cancer or just for surgical staging includes paraaortic lymphadenectomy and omentectomy.

Before I involved deeply in laparascopic gynecologic oncology surgery, I have learned much form dr. Wachyu Hadisaputra, as the chairman of the gynecologic endoscopy working group from POGI (Indonesian Society of Obstetrician and Gynecology), in laparoscopic gynecologic non oncology surgery.

In late 1990 I attended a symposium Laparoscopy in Gynecologic Oncology in Philadelphia organized by the late Prof. Dargent under IGCS (International Gynecology Cancer Society). In 2005 I followed a workshop for radical hysterectomy and lymphadenectomy on unbalmed cadaver (fresh cadaver) in Florida during Annual Meeting Society of Gynecologic Oncology, and I joined for the next year workshop. The trainer came from prominent countries such as USA, Germany and France. Since then I practiced total hysterectomy with laparoscopic surgery, even in small number of cases. In early 2009 I had an opportunity to visit Prof. Nam hospital in Seoul and watched him doing live radical surgery in the operating theatre. In the same year I practiced paraaortic lymphadenectomy on swine in Shanghai. Back from Seoul I and dr Chamim started doing radical surgery at Fatmawati Hospital and months later I followed an unbalmed cadaver Laparoscopic Symposium in Oncology in Taichung Taiwan. Another case done at Omni Hospital to fullfil dr. Boy Busmar's invitation.

From what I had been experienced I can suggest that we have set a solid team which is very important and supported by good equipment such colpotomy device, bipolar dissection, scissor, hormonic and ligaclip are very helpful if possible but if is available enough with bipolar dissection. The first step to assess the internal genital, if there is a massive adhesion it would prolong the surgery time.

We then opened or incised the peritoneum between round ligamentum and fimbria and extended medially and laterally to exposed psoas muscle and ureter which cross the common iliac artery. The round ligament should stay intact to ease the surgery and prevent the uterus not to distort. Vesico-uterine fold was opened and we made a space such as paravesical and pararectal spaces. Then the procedure was done medially to extract fat and node ventral to common iliac until the wall of the artery was noted and we did lymphadenectomy along the external iliac artery. By doing this procedure, the iliac vein, internal iliac and uterine artery will be exposed and obturator nerve as well. The nodes was then put in the plastic bag made of plastic drug so it is very cheap instead of special bag sold by the supplier. Ureter was disected and pushed aside and ureteric canal was opened.

Vagina was amputated by direction of colpotomy device and top of the vagina sutured through the vagina as suggested by Prof. Nam. By doing this if we think that vagina cut was inadequate, we can cut it more.

The beginning of the procedure took more than 4 hours and as mentioned by the literatures that the learning curve will decrease by the amount of surgery. We have done 5 cases, 1 of those with serosal laceration of the sigmoid and repaired the lacerated serosal with few stitches and 1 case with iliac vein and the bleeding could be controlled using ligaclip. I hope that this minimal invasive surgery will enrich our modality in handling the malignancy in gynecologic surgery and we can positioned to the level of developed countries in Asia.

The Asian Society of Gynecologic Oncology has planned to train Young Gynecologic Oncologist in this kind of surgery. In July 2010 there will be a workshop laparoscopy in gynecologic Oncology in Seoul and Indonesian Society of Gynecologic Oncology (*Himpunan Onkologi Ginekologi Indonesia*) is asked to propose candidates. Accommodation and transportation while in Korea will be covered by ASGO. I hope, this invitation can be responded well by our young gynecologic oncologist.

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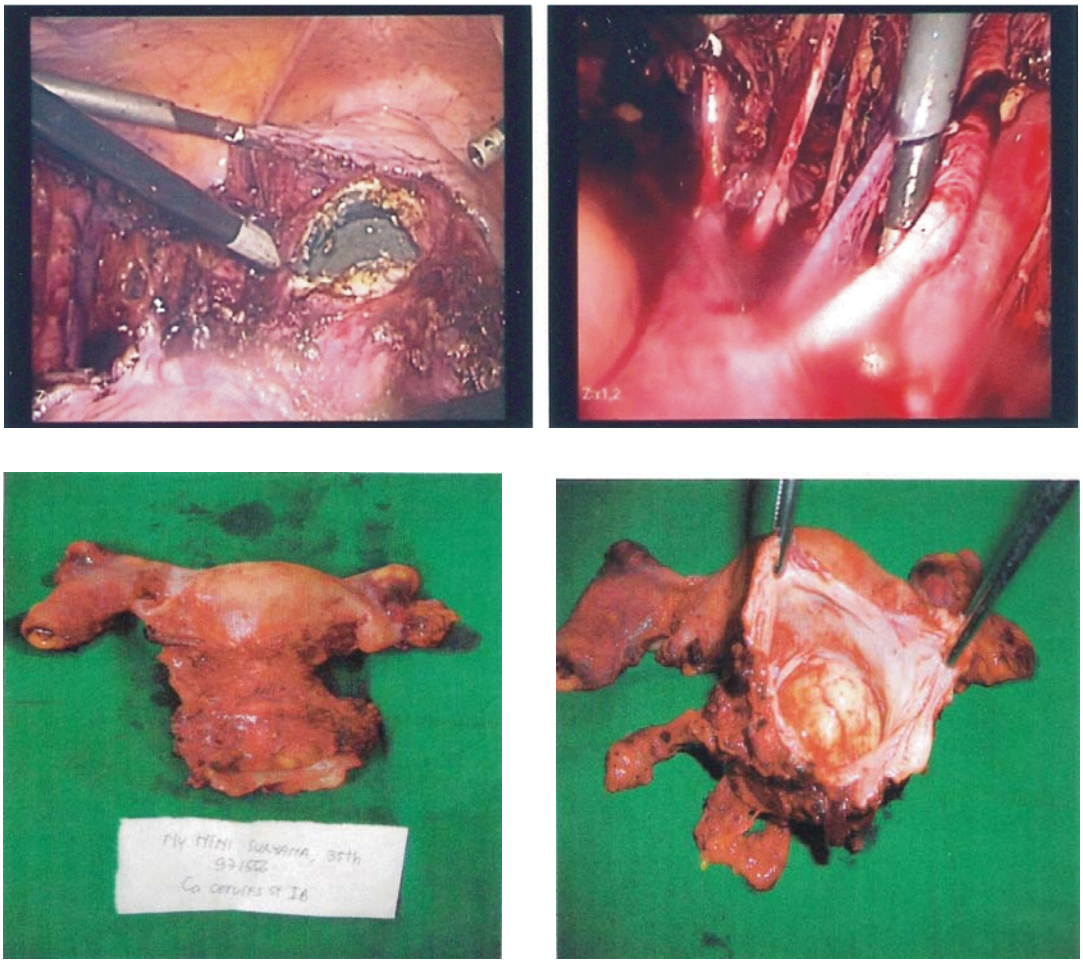

Figure. Laparascopic radical hysterectomy cervical cancer on a 35 years old woman, was done in Fatamawati Hospital, Jakarta