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LAPAROSCOPIC LUMBO-AORTIC DISSECTION BY TRANSPERITONEAL ROUTE IN 4 CASES

Dr. Kaoutar Nassim*

45; Avenue Houmane El Fetouaki, Aviation, Rabat, Morocco.

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***Corresponding Author**
Dr. Kaoutar Nassim
45, Avenue Houmane El Fetouaki, aviation, Rabat, Morocco.

INTRODUCTION

A lumbo-aortic lymphadenectomy has long been considered an intervention reserved for experts. Thanks in part to the rise of laparoscopy, the procedure has become more democratic and is now practiced in many public and private institutions. As with any lymphadenectomy, its therapeutic benefit remains debated and its indication is far from being consensual in other European countries and across the Atlantic. In the United Kingdom, for example, the indications for curing are particularly limited, not to say nonexistent in gynecological oncology and this whatever the stage.[1] The European Society for Medical Oncology (ESMO) accepts an indication for lumbar aortic lymphadenectomy for the early stages of ovarian cancer and recommends that the procedure be performed by a trained operator.

In France, the INCA has limited indications mainly to ovarian and endometrial cancers. In advanced cervical cancer, lumbo-aortic dissection is not a standard. The only randomized study comparing surgical staging and imaging alone in 61 patients concluded that there was no proven benefit from surgical staging.[2] In the absence of a prospective trial proving the benefit of lumbo-aortic dissection, Brockbank E. et al. conclude that the decision must be made on a case-by-case basis, after discussion with the patient.[3] The literature therefore does not give us a precise answer on the action to be taken for the 3000 new cases identified each year, but the incidence decreases regularly. The development of the vaccine will help reduce the incidence even if part of the immigrant population escapes this prevention.

We will describe our experience of lumbar-aortic dissection by transperitoneal route in 4 cases.

OBSERVATION

We performed a lumbo-aortic dissection in 4 patients whose average age was 64 years ranging between 55 and 70 years.

The histological type of lesions was as follows:

Endometrial cancer:

1 grade 3 endometrioid carcinoma, FIGO 1B.

1 grade 1 endometrioid carcinoma, FIGO 2.

1 Clear cell carcinoma.

Ovarian cancer

1 Sub-serous cystadenocarcinoma, FIGO 1A.

The operating time was between 45 and 90 minutes with an average of 60 minutes.

The number of lymph nodes removed is between 6 and 15 lymph nodes with N0 pathology results. We noted no complications.

Indications for lumbo-aortic lymphadenectomy in gynecological cancers

1-Endometrial cancer

The INCa (National Cancer Institute) indicated the recommendations for performing lumbar-aortic dissection in endometrial cancers[9] based on the new FIGO classification of 2009[5] and on the risk of recurrence, defined according to the stage, histological type and grade according to the classification of the European Society for Medical Oncology (ESMO) published in 2009.[4]

Lumbo-aortic dissection is indicated

- For histological type 2 (clear cell carcinomas, papillary / serous carcinomas, carcino-sarcomas) whatever the FIGO stage and the pelvic lymph node status.
- For histological type 1 (endometrioid adenocarcinoma): stage I with high risk of recurrence (IB grade 3, presence of emboli); stage II: can be discussed immediately or following a positive pelvic lymphadenectomy; stages III and IV.

The most common histological type is endometrioid adenocarcinoma with 80% of cases. The three major prognostic factors for endometrial carcinoma are: histological grade, depth of invasion in the myometrium and lymph node status.[6]

Lymph node staging is an important prognostic factor and above all an essential decision criterion for adjuvant treatment. Several studies have shown a significant change in adjuvant treatment linked to lymph node status in 20 to 60% of cases.[6,7] The diagnostic importance of lumbar-aortic dissection is not questioned since surgical lymph node exploration currently remains the reference technique despite the development of imaging techniques. However, its therapeutic impact and the risk / benefit balance are discussed.

2-Cervical cancer

Lumbo-aortic lymph node involvement is the most powerful prognostic factor with a 6 times greater relative risk of death compared to lymph node involvement limited to the pelvis.[8] The rate of lymph node involvement is linked to tumor volume and to the FIGO stage.[9] Lumbo-aortic lymph node involvement ranges from 5% for IB1 to 66% for stage IV.

For IB1 lesions, lumbo-aortic dissection is only indicated in the event of pelvic lymph node involvement. On the other hand in case of pelvic metastasis, the risk of lumbar-aortic involvement is 25%.

In case of pelvic involvement, a lumbo-aortic dissection must be performed. The place of predilection of the lymph node aortic aortic attacks is at the latera-aortic level (72% of the attacks), whereas the attacks at the latero-caval level are rare (5%). In case of lumbo-aortic lymph node invasion, treatment will combine concomitant radio-chemotherapy.

The standard for locally advanced cervical cancers above IB2 according to the FIGO classification is a concomitant radio-chemotherapy treatment.[10]

3-Ovarian cancer[11,12,13]

In advanced ovarian cancer, lumbo-aortic dissection is performed laparotomic during cyto-reduction surgery.

Early stage ovarian cancer (stages I-II), lymphadenectomy is probably not useful in all early stage tumors, especially for mucinous tumors and stages IA grade 1 where the rate of invasion lymph node is almost nil. So in our opinion, it must continue to be carried out systematically in the most lymphophilic tumors (serous or clear or undifferentiated cell tumors) because it makes it possible to optimize the therapeutic management by detecting patients whose prognosis is darker and whose therapeutic management must therefore be different from N- patients.

Surgical technique: 14

Lumbo-aortic dissection requires good experience in laparoscopic surgery and advanced cancer surgery as well as a perfect mastery of the spaces of the retroperitoneum.

The indication for performing this major surgical procedure must be discussed in CPR, taking into account the benefit / risk balance; frequent comorbidities and retro-peritoneal anatomical variations (lower polar renal arteries, retro-aortic left renal vein, etc.).

1/Dissection limits

- Above: the left renal vein.

-Bottom: aortic bifurcation;

Laterally the ureters. depending on the position relative to the vessels, we divide the dissection into a group:

1- Latero-aortic under mesenteric

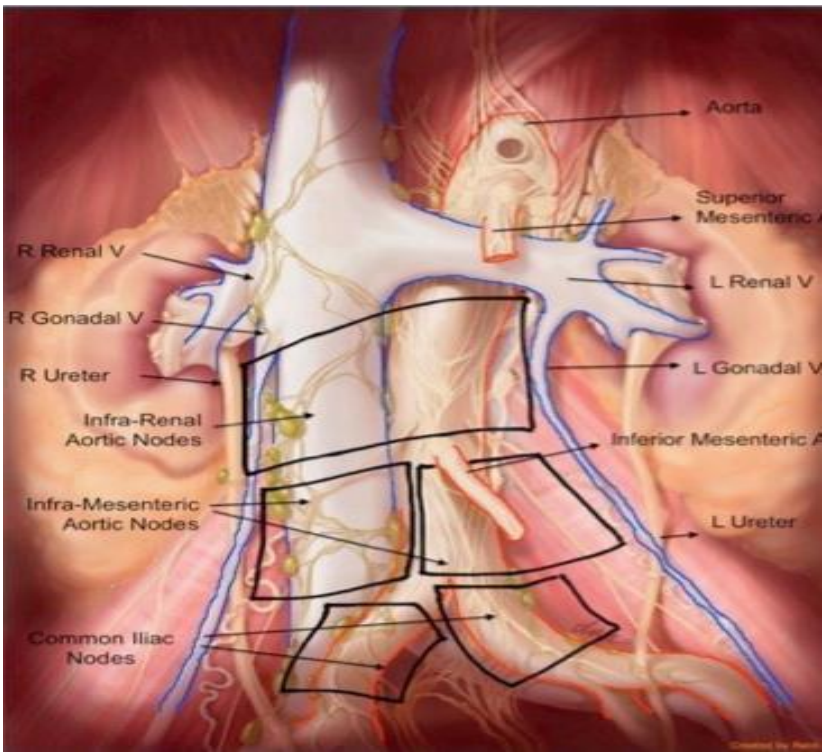
2- Latero-aortic above mesenteric

3- Pre-aortic

4-Inter-aortico-cellar

5- Pre-cellar

6- Latero-cellar



Complication of lumbo-aortic dissection: 15

- Vascular complications: 3%

Often linked to lacerations of peri-lymphatic fatty tissue, which can be prevented by dissection and careful use of hemostasis energies.

More rarely an arteriovenous wound can be secondary to a lack of knowledge of frequent anatomical vascular variation.

Ureteral and digestive lesions: <1%

They are more related to gestures of maximum tumor reduction than lymph node dissection.

Lymphocele: 5 to 10%

Corresponding to a partitioned accumulation of lymphatic fluid, it is rarely symptomatic and regresses spontaneously.

In case of compressive symptoms, percutaneous drainage under ultrasound or CT control is recommended.

Lymphedema: 8%

Intra-tissue fluid accumulation due to lymphatic insufficiency. Treatment is based on decongestant physiotherapy. Antibiotic therapy will be necessary when lymphedema is complicated by erysipelas.

CONCLUSION

The place of lumbo-aortic dissection in gynecological cancers has been debated for many years, in particular because of the technicality and the morbidity of the surgical procedure.

It presents a definite diagnostic interest allowing a more precise staging thus guiding a more adapted therapy.

Opinions still differ regarding its therapeutic role. However, it must be evaluated by balancing its morbidity and its effectiveness in terms of survival rate.

So it will be on a case-by-case basis that decisions will be taken within multidisciplinary teams in an attempt to identify situations where lumbar-aortic dissection will bring definite benefit.

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