Broad ligament abscess after operative hysteroscopy

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Summary: Delayed complications in hysteroscopic surgery are very rare. This report describes an abscess of the left parametrium which occurred in a young woman after an operative hysteroscopy in which uterine perforation occurred.

Key words: Hysteroscopy; Uterine perforation; Abscess.

INTRODUCTION

Operative hysteroscopy is still today a valid and effective surgical endoscopic method for the treatment of endouterine pathologies such as synechiae, septa, myomas and submucosal polyps, and removal of foreign bodies ([1, 2]). The therapeutic use of the hysteroscope with its operative sleeves is a valid alternative to the classical surgical operations. Through the operative sleeves it is possible to introdure more or less rigid microtweezers or microscissors, catheters and electrodes for coagulation. The spread of the resectohysteroscope, like its urological counterpart has further extended the range of possible applications (endometrial ablation) and also reduced the time required for various operations. However, it must also be remembered that if not used carefully operative hysteroscopy is not without danger ([3, 4]).

The complications may be either intraoperative or delayed. The causes for both intra- and post-operative complications are to be sought principally in the inexperience of the operator, the result of the erroneous belief that endoscopic surgery is simpler and easier than traditional surgery. We wish to repeat and emphasize that hysteroscopic surgery should be performed principally by doctors who have long and extensive experience of diagnostic hysteroscopy.

Diagnostic experience allows both speedy orientation of the optics and accessories in the uterine cavity and also determination of the technical modalities with which the different pathologies should be tackled. This naturally translates into a greater rapidity in the operation and less possibility of leading to any complications.

This paper describes the case of an abscess of the cardinal ligament developed

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shortly after operative hysteroscopy that came to our attention one year later.

CASE REPORT

The patient, a 23 years old para O/O/O/O came under our observation after complaining of recurrent pelvic pains for about 10 months. On gynecological examination, the uterus appeared to be of almost normal solidity and dimensions, but was rather firm and markedly turned to the left. The patient's clinical history can be summarized as follows.

A year previously, the woman had been subjected to operative hysteroscopv for a small submucosal isthmo-cervical fibromyoma of the rear wall of the uterus which, on echographic examination, measured 1 centimetre in maximum diameter. At that time, the patient had complained of menorrhagie symptoms for about a year past. Hysteroscopic examination showed a small fibromyoma in the isthmus on the rear wall, covered with ectasic surface vessels as described. She was advised to have the formation removed by resectohysteroscopy. The description of the operation in the clinical record noted considerable difficulty in dilatation of the cervical canal because of its particularly fibrotic condition. An attemot was made to introduce the resectoscope, at this point causing perforation of the anterior wall of the uterus. A laparoscopy was then performed and identified the point at which perforation had occurred, but since no loss of blood was noted in the damaged area, the patient awoke from anesthesia without the surgeon having completed the operation. She was discharged the following day in good general condition and antibiotic therapy was advised. Twenty-four hours later the patient started to complain of a temperatore reaching levels between 38.5° C and 40° C (101° F and 103° F). A vague pain and tenderness on the left side of the pelvic region appeared. She consulted her own gynecologist and was advised to rest and continue the antibiotic therapy. However because of persistence of the temperature and progressive decline in general condition, and an increase of pain in the left uterine area, the patient was again hospitalized and subjected to various diagnostic-instrument tests. Blood tests showed a leukocytosis with a range from 20,500 to 27,000 cells per mm^3. The gynecological examination aroused considerable pain on palpation in correspondence with the left lateral fornix or when movements were imposed on the uterine cervix. Echography on the seventh day demonstrated the presence of a roundish hypoechogenic left uterine formation. Notwithstanding a broad spectrum antibiotic therapy was given the general and local symptoms deteriorated and it was therefore decided to perform a laparotomic exploration that revealed an abscess in the left large ligament. This abscess was cut and thoroughly drained. Twelve hours from the operation the patient started to feel better, the pelvic pain and temperature disappeared in another day, and the patient was discharged healed on the seventh day.

DISCUSSION

The possibility of utero-adnexal infections developing after operative hysteroscopy, though very rare, has been reported. In addition, in patients with previous inflammatory pelvic disease there is a risk of a post-operative return of the infection. In the case brought to our attention and described, the complications arose for reasons, we may suppose, attributable to the inexperience of the operator, inadequate sterilization of the instruments or failure to respect scrupulously the rules of asepsis during the operation.

Formation of the abscess was probably favoured by the trauma inflicted by the resectohysteroscope on the particularly fibrotic, dilatation-resistant, cervical canal. We are more inclined to think of spread of pathogenic germs across the thickness of the cervical canal into the left parametrium, with subsequent parametritis and abscess formation, rather than to consider the development of parametritis as the result of uterine perforation, seeing that this took place on the anterior wall and not on the large ligament.

Although there are many publications on the reliability of the resectohysteroscopic technique for resolving various endouterine pathologies, we feel compelled to emphasize the necessity for long diagnostic hysteroscopic training before proceeding to hysteroscopic surgery. In addition, it is of fundamental importance to sterilize the instruments thoroughly and comply with the most rigorous rules of asepsis during the operation. It is also

necessary to study the patient in advance, from both clinical and instrumental points of view with echography and hysteroscopy and to evaluate the uterine structural characteristics, in order to select only those patients who really require surgery. Finally, we would point out that improvisation can produce very severe damage, the more severe the more inexperienced the operator.

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