



Interval Peritoneal Changes – Congenital or Acquired?



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INTRODUCTION

This presentation is of two patients who had changes in the post-surgical appearance of the peritoneum interpreted by one author (DCM) as development and/or progression of endometriosis associated pockets and interpreted by the other author (REB) as reaction to surgery with secondary retraction of peritoneum and unroofing of previously undiagnosed congenital, cryptic pockets. There is also new implantation of endometriosis. The first patient was presented at the VI World Congress of Endometriosis.

Peritoneal pockets associated with endometriosis were first described by Sampson in 1927.



Batt (1989) concluded that pockets appear to be rudimentary duplications of the primary Mullerian ducts. Batt (1989, 1995, 2003) also pointed out that cryptic pockets may be missed and that pockets are not Allen-Masters Syndrome. Martin (1999) published a case interpreting a “pocket” as an acquired finding.

There is a problem at repeat surgeries in determining if new findings are due to inadequate observation at surgery, endometriosis, modification of anatomy by surgical trauma or a combination of these or other factors.

OBJECTIVE

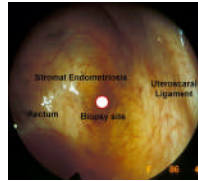
The purpose of this presentation is to demonstrate the peritoneal changes that occurred after age 14 in surgically treated patients.

MATERIALS AND METHODS

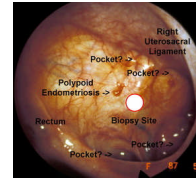
The chart records, including operative reports and photographic documentation was reviewed.

RESULTS

Patient 1- Laparoscopy performed at age 14 revealed polypoid endometriosis in the left uterosacral and flat stromal endometriosis in the right rectovaginal pouch. The polypoid area was excised and had glands and stroma of endometriosis. A biopsy of the red area was obtained and showed stromal endometriosis. A second laparoscopy at age 15 revealed multiple pocket-like defects and endometriosis in the area of the previous biopsy.

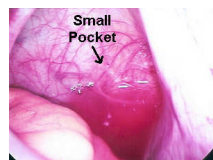
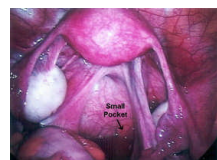


Stromal endometriosis was present at age 14.

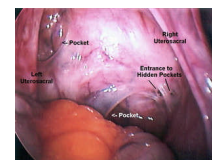


Four pocket-like defects were present at age 15.

Patient 2 - This patient was referred after endometriosis was diagnosed at laparoscopy. A second laparoscopy at age 14 demonstrated endometriosis, a right uterosacral pocket (about 1 cm in diameter), medial ureteral deviation and a right broad ligament recess large enough to hold the ovary. A third laparoscopy at age 15 revealed endometriotic vesicles of less than 1 mm, but no other significant change. A fourth laparoscopy at age 17 in 2004 revealed endometriosis, enlargement of the pockets or defects, and either an opening into a previously hidden cryptic pocket or partial closure of a pocket mouth was noted.



Second Surgery at age 14



Fourth Surgery at age 17

DISCUSSION

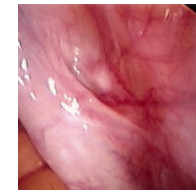
Surgical therapy can obscure observation designed to study the progression, regression or stability of endometriosis.

Pockets:

- a. Have a smooth transition at the edges
- b. Can generally be everted, but some may be too close to vessels or nerves for safe eversion.

Defects after surgical excision:

- a. Have a shelf like transition at the edge
- b. Have a thin attenuated base.



Pocket with endometriosis



Pocket-like defect after excision

CONCLUSIONS

In these two patients, pockets were not initially seen in one patient and were small in the second patient. Larger and more pockets and/or pocket-like defects were seen at later surgery. Either unroofing of cryptic pockets or partial closure of pockets occurred in one patient. These two cases demonstrate changes in peritoneal appearance that can occur after age 14 in surgically treated patients.

However we cannot determine if these changes are due to a reaction to surgical therapy, endometriosis, inadequate observation at the first surgery, or a combination of these. Prospective studies on the natural and surgically modified history of endometriosis and endometriosis associated peritoneal pockets in adolescents, starting before thelarche, are needed to compare and contrast change over time.

Acknowledgment: Portions of this presentation were presented at the VI World Congress of Endometriosis and in the Endometriosis Color Atlas posted at <http://www.memfert.com/lae88.htm>