

THE MASTER CLASS

To Freeze or Not to Freeze?

This month's column is brought to us by William H. Parker, M.D., of the University of California, Los Angeles, who is a past president of the American Association of Gynecologic Laparoscopists.

Dr. Parker has been instrumental in guiding our management of adnexal masses and has published widely on this topic.

He has been successful in balancing a busy practice in Santa Monica, Calif., with an academic and writing career, and has even published several books—including "A Gynecologist's Second Opinion: The Questions and Answers You Need to Take Charge of Your Health" (New York: Plume Books, 2003) and "The Incontinence Solution: Answers for Woman of All Ages" (New York: Simon & Schuster, 2002)—to help a lay audience understand and interpret common gynecologic dilemmas.

Medicine thrives on controversy, which spurs us to learn and reach a consensus about the truth. One area of controversy is the use of frozen sections at laparoscopy in the treatment of ovarian masses. Although I certainly agree that frozen sections enable definitive treatment at the time of the original surgery, I await permanent sections. I believe permanent sections provide the following advantages:

- ▶ The exact diagnosis can be reached. If necessary, a pathology consultation can be undertaken.
- ▶ Further preoperative testing can be performed as desired by the gynecologic oncologist.
- ▶ The gynecologic oncologist has an opportunity to speak directly with the patient and her family and discuss options.
- ▶ The literature supports the need for early intervention—within 1 month—if an ovarian cancer is disrupted at laparoscopic surgery, but it need not be immediate.

As you will see in this Master Class column, Dr. Parker holds a different opinion. He bases his approach on the fact that frozen sections are 95% accurate when the diagnosis is cancer. He stresses that when physicians use his approach, patients are subjected to only one surgery and recovery.

When the frozen section results are uncertain, Dr. Parker agrees that decisions should be based on the final pathology.

He also brings up an interesting point: Too many physicians operate on suspicious masses when they have no intention of staging the patient if cancer is found. This, we both agree, is bad practice. ■

DR. MILLER, a reproductive endocrinologist in private practice in Arlington Heights, Ill., and Naperville, Ill., is the medical editor of this column.



BY CHARLES E. MILLER, M.D.

Patient Selection Key to Laparoscopic Management of the Adnexal Mass

Carefully selected patients with adnexal masses may benefit greatly from undergoing laparoscopic surgery as opposed to laparotomy. Recovery is shorter and less painful; most patients are discharged the same day and return to work within a week to 10 days.

Nonetheless, the laparoscopic approach in postmenopausal women was quite controversial when we began to make the case for it, first in a pilot study in 1990 (Am. J. Obstet. Gynecol. 1990;163:1574-7) and then in a 1994 paper presenting our experience with 61 patients (J. Am. Coll. Surg. 1994;179:733-7). I am pleased to note that in the ensuing years, the laparoscopic management of adnexal masses in appropriate patients has won over most critics.

The controversy in those early years centered around the argument that it was too difficult to determine which patients were at low risk for ovarian malignancy and thus would be considered "appropriate" candidates for laparoscopy. Minimally invasive surgery was thought to potentially expose patients with cancer to the risk of intraoperative rupture of a malignant mass,

with the resultant seeding of the tumor into the peritoneal cavity.

Using careful patient selection and appropriate intraoperative evaluation and management, however, not a single postmenopausal patient whom we chose for laparoscopic treatment—using the selection criteria we defined—was diagnosed with ovarian cancer at the time of surgery.

Fortunately, the selection criteria that are used to distinguish patients with a low risk of malignancy have proved to be remarkably accurate when they are used and correctly applied.

All patients should undergo a thorough clinical examination, transvaginal ultrasound, and—in postmenopausal patients only—cancer antigen 125 (CA 125) testing. In premenopausal patients, CA 125 findings are nonspecific, and the test has a high false-positive rate.

Adnexal masses that are fixed, irregular, or solid are suspicious for malignancy. The presence of ascites or an upper abdominal mass should be considered indicative of cancer until proved otherwise. On ultrasound, suspicious findings include a mass with irregular borders, papillations, solid areas, thick septa, ascites, or matted bowel. A

CA 125 value greater than 35 U/mL in a postmenopausal patient is not conclusive, but adds to my reluctance to perform laparoscopic surgery.

On the other hand, several findings support the impression that a mass is benign. Masses that are smaller than 10 cm and those with ultrasonic characteristics of simple cysts, dermoid cysts, endometriomas, or hemorrhagic cysts have a low risk of malignancy.

It should be noted that some patients do not require surgery for an adnexal mass. Watchful waiting is appropriate in younger women with benign-appearing simple cysts, even if they are of significant size.

Even in postmenopausal women, cysts that are 5 cm or smaller with benign characteristics also can be followed with frequent clinical and ultra-

sound examinations and CA 125 testing. Generally, we follow postmenopausal patients at 3 months, 6 months, and 1 year and then at 18-month intervals if no changes are evident.

Laparoscopic surgery for an adnexal mass must be undertaken methodically by an appropriately trained surgeon. The surgical team should be prepared for the possibility that an unsuspected malignancy may be found. Pelvic and abdominal washings should be performed and preserved for cytology in case a carcinoma is subsequently diagnosed. This simple step should be undertaken at the onset of surgery.

Careful inspection of the pelvis and abdomen for excrescences or other signs of cancer also should be done. Biopsy of any suspicious areas should be performed. Frozen section procedures should be performed for every postmenopausal patient and for any patient with suspicious regions noted within the peritoneal cavity, so it is a good idea to operate in a facility that has the capacity to undertake frozen sections.

Ideally, a gynecologic oncologist or skilled general surgeon should be on call to convert to a staging laparotomy with lymph node sampling if cancer is encountered. If a gynecologic oncologist is not available to assist immediately, the appropriate surgery should be performed within a few days.

Laparoscopic management is possible even in some special circumstances in properly selected patients:

- ▶ **Endometriomas.** Adnexal masses believed to be endometriomas can almost always be managed laparoscopically. Stripping of the cyst wall is associated with fewer recurrences, but removes more follicles than does laser ablation of the cyst capsule inside the ovary.

- ▶ **Adnexal torsion.** For many years, the standard surgical practice in the face of adnexal torsion was to perform a laparotomy to excise the tube and ovary. Landmark research by a team of Israeli surgeons, however, revolutionized the management of this condition by proving that laparoscopic detorsion could be performed safely and effectively, even in cases in which the ovaries appeared not to be viable, thus sparing the adnexa and preserving ovarian function. Fears that untwisting ischemic adnexa would prompt a pulmonary embolism have proved to be unfounded; no such complication has ever been reported.

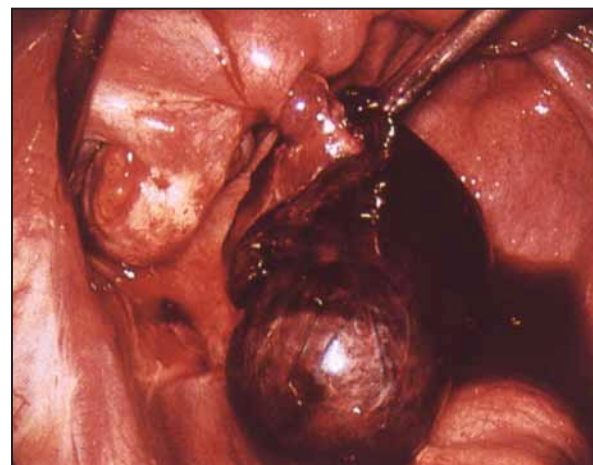
- ▶ **Dermoids.** Laparoscopic management using careful surgical technique and copious irrigation of the peritoneal cavity if a spill occurs has proved to be safe, and laparoscopic dermoid cyst removal has been performed safely even during pregnancy. ■



BY WILLIAM H. PARKER, M.D.



Laparoscopic management of a dermoid cyst (above) requires copious irrigation of the peritoneal cavity.



Laparoscopic management of ovarian torsion can be performed safely and effectively.

PHOTOS COURTESY DR. WILLIAM H. PARKER