

with an average indemnity of \$258,968. The school with the highest average indemnity was Brooklyn, at \$344,137. The number of insured obstetrician-gynecologists at these four schools varied over this 15-year period from a low of about 60 to the present number of 98. Since these are academic institutions, the percentage of insured subspecialists (maternal-fetal medicine, gynecologic oncology, and reproductive endocrinology and infertility) was relatively high, at approximately 30% of the insured physicians. Dr. Barbieri reported a total of 554 paid claims over a period of 10 years, with an average indemnity of \$454,047. This is almost twice the average indemnity paid by SUNY obstetrician-gynecologists insured by Academic Health Professionals. New York has one of the highest indemnity loss rates for obstetrician-gynecologists in the country. We understand that these are gross comparisons, but the differences may be instructive. Academic obstetrician-gynecologists in their own captive insurance company, with the ability to look strictly to their own individual liability and not shared with an institution, may have less in indemnity loss than the average obstetrician-gynecologist.

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REFERENCE

1. Barbieri RL. Professional liability payments in obstetrics and gynecology. *Obstet Gynecol* 2006;107 (3):578-81.

In Reply:

I appreciate the thoughtful letters from Dr. Cohen on behalf of the Society for Maternal-Fetal Medicine (SMFM) Medical Legal Subcommittee and Drs. Dillon and Yeh. The authors of the letters are nationally recognized leaders who have greatly contributed to our efforts to respond to the professional liability crisis.

Massachusetts is a designated "liability crisis" state by the American Medical Association. Based on data from the Massachusetts Board of Registration in Medicine, the liability crisis

Disclosure:

Dr. Dillon is President of the Academic Health Professionals Insurance Association.

in Massachusetts appears to impact generalists and specialists in unique ways.¹ For generalists, there are a very large number of lost claims with substantial average liability payments. In contrast, for specialists there are very few lost claims, but when a specialist makes a liability payment, it is exceptionally large.

As noted by Dr. Cohen and colleagues, a major weakness of the paper is that no data are reported concerning the number of plaintiff claims. They note that the majority of SMFM members who responded to their questionnaire were named as defendants in liability cases, and many were named multiple times. I agree with Dr. Cohen that the number of filed claims against specialists is far greater than the number of claims with a payment.

Dr. Cohen and colleagues hypothesize that specialists in Massachusetts may have employment relationships that protect them from tort claims. Massachusetts has a unique 19th century law, "Charitable Immunity," which protects hospitals organized as "not-for-profits" from significant financial liability in tort cases. Consequently, Massachusetts' not-for-profit hospitals are almost never named as defendants in professional liability cases. In Massachusetts, the entire professional liability burden is shouldered by physicians, not hospitals, regardless of the employment status of the physician.

Drs. Dillon and Yeh's data concerning the liability of a group of academic physicians is very important and clearly points the way to additional research. Their data raise a number of important questions for future research: When physicians are organized in large group practices, are they less vulnerable to professional liability torts than physicians in small groups? Do obstetricians who work at hospitals with large labor and delivery units have better claims experiences per delivery than physicians who work at small units?

The future of obstetrics and gynecology will be significantly influenced by our ability to solve the current tort crisis. We all need to work together to help solve this critical challenge.

Robert L. Barbieri, MD
Boston, Massachusetts

REFERENCE

1. Barbieri RL. Professional liability payments in obstetrics and gynecology. *Obstet Gynecol* 2006;107:578-81.

Pulmonary Embolism After Major Abdominal Surgery in Gynecologic Oncology

To the Editor:

The article by Martino et al¹ highlights a critical element in the perioperative care of the gynecologic oncology patient. The authors suggest that additional randomized studies are needed to determine whether additional prophylactic measures may benefit high-risk patients. Although both pneumatic compression and low molecular weight heparin are discussed, there is no mention of a significant body of evidence that points to the use of regional anesthesia in the prevention of embolic events such as pulmonary embolism. Both the anesthesia and orthopedic literature contain numerous clinical trials that point to several benefits of regional anesthesia. Benefits include a decrease in the odds of deep venous thrombosis, a reduction in the incidence of pulmonary embolism, decreased transfusion requirements, and decreases in pneumonia, respiratory depression, myocardial infarction, and renal failure.²⁻⁴ There has been considerable discussion of the risks of regional anesthesia in the perioperative setting and the latest American Society of Regional Anesthesia Guidelines⁵ present evidence that allows for the concomitant use of low molecular heparin and regional anesthesia. I suggest that any strategy for the prevention of perioperative embolic events in the high-risk gynecologic oncology patient include a discussion of the risks and benefits of the use of regional anesthesia.

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5. Rowlingson JC, Hanson PB. Neuraxial anesthesia and low-molecular-weight heparin prophylaxis in major orthopedic surgery in the wake of the latest American Society of Regional Anesthesia Guidelines. *Anesth Analg* 2005;100:1482-8. Letters to the Editor

To the Editor:

Martino and colleagues¹ have reported an unusually high rate of perioperative pulmonary embolism among gynecologic cancer patients, suggesting that external pneumatic compression may be ineffective in this group. In our experience, external pneumatic compression is the preferred method of perioperative prophylaxis for most gynecologic cancer patients.²⁻⁴ However, a subset of patients will nevertheless develop perioperative venous thromboembolism despite external pneumatic compression. The overall incidence may vary from less than 1% to greater than 3% depending on the risk factors of the individual.⁵ Dr. Martino failed to stratify the group of cancer patients to find a subset of women who are more prone to develop pulmonary embolism despite external pneumatic compression.

In practice settings where external pneumatic compression cannot be used optimally in a manner defined by the providers, heparin should be considered. We would urge caution concerning Dr. Martino's stance in recommendations for combination prophylaxis among all gynecologic cancer patients,⁶ particularly since the increased incidence may be confined to a subset of individuals. We have previously shown that combination prophylaxis using external pneumatic compression and low molecular weight heparin is cost-effective in gynecologic oncology surgery. Although combination therapy can be considered as an option in select high-risk patients, the lack of evidence should temper recommendations regarding its use and further justify the

Financial Disclosure

Dr. Maxwell has received a consulting fee for his work on a cost analysis with Tyco.

need for a large randomized controlled trial comparing combination prophylaxis with single-modality prophylaxis in gynecologic oncology.

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Dan Clarke-Pearson, MD

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In Reply:

We thank Dr. Balestrieri for his appreciation that gynecologic oncology patients who have major abdominal surgery and a cancer diagnosis are at a significantly increased risk to develop a perioperative venous thromboembolism.¹ However, we do not believe there is a role at the present time for spinal/epidural anesthesia in patients having major abdominal cancer surgery who receive pharmacologic thromboprophylaxis according to the recommended dose and schedule used

at the present time. The reasons for this are twofold:

1. In 1997, the U.S. Food and Drug Administration (FDA) issued an advisory following the identification of 30 patients who developed a spinal hematoma after they received low molecular weight heparin around the time of neuraxial anesthesia.² This led to the placement of a black box warning that, when epidural/spinal anesthesia is used for regional anesthesia, patients who receive thromboembolic operative prophylaxis with low molecular weight heparins or heparin are at an increased risk to develop an epidural or spinal hematoma that can result in long-term or permanent paralysis (Aventis Pharmaceuticals. Lovenox prescribing information. Available at: <http://products.sanofi-aventis.us/lovenox/lovenox.html#Boxed%20Warning>. Retrieved May 2, 2006).
2. The FDA-approved dosage and schedule of low molecular weight heparin (enoxaparin) for patients having abdominal surgery for thromboembolic prophylaxis is for either a preoperative dose of 40 mg given subcutaneously 2 hours before surgery and then once daily in the postoperative period or the first dose (fondaparinux) 6-8 hours after surgery and then once daily (see package insert prescribing information for enoxaparin and fondaparinux). If a surgeon chooses to use combination prophylaxis, then for the present time our recommendation is to use a low molecular weight heparin with intermittent pneumatic compression and continue both until hospital discharge in high-risk patients. Present investigations are evaluating whether there is a benefit for extended prophylaxis to 28 days.

Patients who are undergoing major gynecologic oncology surgery are often admitted the day of surgery. Recently, we presented the results from the Pulmonary Embolism Prophylaxis Survey at the 37th Annual Meeting of the Society of Gynecologic Oncologists (SGO), which was a survey of members of the SGO. We identified that nearly 60% of gynecologic



oncologists were using some form of perioperative low molecular weight heparin or heparin (Martino MA, Williamson E, Rajaram L, Lancaster JM, Hoffman MS, Clarke-Pearson D. The Pulmonary Embolism Prophylaxis Group Survey [PEP Group]: Defining practice patterns in gynecologic oncology [abstract #54]. Society of Gynecologic Oncology 2006 Annual Meeting Presentation.). While we agree there may be a benefit to regional anesthesia, it should not be used in patients who have abdominal cancer surgery and receive perioperative thromboembolic prophylaxis with either a low molecular weight heparin or heparin. The reasons are that, despite the best of precautions and education of staff members of the significant risks, epidurals are still placed around the time of the injection of low molecular weight heparin. This places patients at a significant iatrogenic risk—one that is avoidable by communication and standardizing perioperative practice patterns.³

Since deep venous thrombosis (DVT) prevention has recently become one of the top safety goals for the Joint Commission of Accreditation of Healthcare Organizations (JCAHO) and the Agency for Healthcare Research and Quality (AHRQ), enoxaparin or fondaparinux will probably be ordered more often as part of standard orders for high-risk patients. With the introduction of Electronic Medical Records, these safety measures are becoming part of standard admission orders for surgery (eg, Electronic Medical Record order entry at Lehigh Valley Hospital, Allentown, PA). As evidence continues to increase about the safety and efficacy of combination prophylaxis to reduce the risk of DVT, we expect more physicians will incorporate this into their practice. This will lead to increased perioperative

prescribing for low molecular weight heparin or heparin either 2 hours before major surgery or shortly thereafter, which is a contraindication with regional anesthesia. For these reasons, while we sincerely appreciate the suggestion by Dr. Balestrieri for a strategy to prevent a perioperative embolic event using regional anesthesia, we believe the risks of such a strategy in patients having major abdominal surgery are greater than the benefits and should be avoided.

We sincerely appreciate the interest of Dr. Maxwell and Dr. Clarke-Pearson and thank them for their commentary. We agree that external pneumatic compression should be the primary means for prophylaxis. We also believe that a subgroup of patients exists that may require further prophylaxis. This subgroup has now been identified in 2 studies following a risk-stratified analysis. In 2003, Clarke-Pearson et al⁴ identified a subset of patients who were at risk to fail external pneumatic compression. He and his colleagues found that patients with 2 of 3 risk factors (cancer, age greater than 60, and history of venous thromboembolism) were at increased risk to develop a venous thromboembolism in the postoperative period, which they defined as 30 days. Our recent paper validates his findings. We identified cancer and age greater than 60 on logistic regression as risk factors for a postoperative pulmonary embolism.¹

We acknowledge that our rate of pulmonary embolism was high, but this was a nonbiased finding identified through separate database searches and may be a reflection of either the follow-up time period or improved methods of imaging. In our study, we defined the postoperative period as days 0–49, while the prior study had a follow-up of 30 days. Another possible explanation

may be the different imaging techniques used to diagnose a venous thromboembolism. Our study primarily used spiral computed tomographic pulmonary angiography for diagnosis, which is a change from methods of the 1990s when ventilation-perfusion scintigraphy (V/Q) imaging was more commonly used.⁵

Regarding their comment about stratifying cancer subgroups to find a subset of women who may benefit from additional prophylaxis, we refer readers to Figure 1 on page 667 of our article,¹ where cancer patients were stratified, and on analysis we identified that they had nearly a 14 times greater risk of developing a postoperative pulmonary embolism when compared with benign patients. Additionally, we further analyzed categories by cancer diagnosis to identify the baseline incidence rate for patients to develop a postoperative pulmonary embolism. In this analysis, ovarian cancer patients had nearly a 7% incidence rate of developing a postoperative pulmonary embolism. We acknowledge that we were unable to adjust for possible confounding variables since most of these data were unavailable in our database, and this is a limitation of our study.

We recognize that these results, based on a retrospective data review, are suggestive and that a larger study in which patients are randomized to receive or not receive anticoagulation needs to be done. Such a study should compare the two randomized groups for venous thromboembolism outcome as well as complications of prophylaxis such as bleeding. It could also address the question of factors that predispose toward pulmonary embolism. This would have to be a fairly large study and would probably have to be done by a cooperative group or by a team of gynecologic oncologists working together.



For the time being and until a randomized study is complete, we continue to recommend combination prophylaxis for patients with cancer. To implement a uniform strategy for prophylaxis into clinical practice, we recommend a simple strategy based upon risks. If patients have cancer, we consider this a significant risk factor and believe they may benefit from additional prophylaxis. If patients are benign, combination prophylaxis should be left to the treating physician. In the near future, national guidelines from groups such as the Joint Commission (JCAHO) may help us to streamline practice patterns to prevent the development of venous thromboembolism.⁶

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Health Policy Considerations for Our Sexual Minority Patients

To the Editor:

I wanted to thank the editors for publishing the article by Dr. O'Hanlan last month regarding the position of the American College of Obstetricians and Gynecologists (ACOG) on sexual minorities and lesbians.¹ The position was beautifully written and supported with logic, data, and common sense. It is long overdue. The editorial by Dr. Hammond was also very moving, concise, and to the point.² It was a natural reaction by a physician caring for women. His response meant even more coming from someone as respected and knowledgeable as he. I absolutely endorse all of the issues that Dr. O'Hanlan outlined and agree that ACOG should be an advocate for sexual minorities and join our colleagues in the American Academy of Pediatrics, the American Psychiatric Association, the American Psychological Association, and the American Psychoanalytic Association in pursuit of these goals.

Family responsibilities and rights are especially important to me. I am a lesbian and an obstetrician–gynecologist. I've been practicing medicine for

the last 24 years. My partner and I have two children, ages 11 and 14, and we live together as a married couple and closely united family. I legally adopted the children by second parent adoption, and they are receiving as many of the benefits from two parents as possible at this time. Civil marriage would provide our family with protections in case of my disability or death, secure their inheritance, and give my children the important reassurance that their family is part of the great diverse fabric of America. We simply cannot agree to support some rights and not others because we are afraid of creating controversy. Our specialty is no stranger to controversy. We must stand up and protect our patients and our rights to life, liberty, and the pursuit of health, family, and happiness. Let our ACOG officers write these policy statements this year!

Carol A. Krupski, MD, FACOG
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2. Hammond CB. Time to change. *Obstet Gynecol* 2006;107:549.

To the Editor:

The article by Dr. O'Hanlan in the March issue¹ is certainly informative and thought-provoking. Dr. O'Hanlan discusses several instructive points regarding the health care of lesbians and transsexuals and raises concerns about some of the barriers that these patients face in obtaining quality health care. One of the top legislative priorities of the American College of Obstetricians and Gynecologists (ACOG) is to "(oppose) legislative and administrative attempts to limit a woman's right to access all health care services and to prevent physicians from providing all necessary care." Expanding understanding of all of our patients and exerting appropriate political power to ensure equal access and care are certainly under the purview of ACOG's rights and responsibilities.

However, Dr. O'Hanlan advocates that ACOG use its influence by "issuing a policy statement in support of laws that provide...equal access to civil marriage."¹ Dr. Hammond appears to support this view in his editorial in the same issue.² The subject of



same-gender marriage has provoked heated argument among lawmakers for several years. Impassioned debate continues among private citizens as the matter is taken to the polls in individual states. Clearly, there is a wide diversity of opinion regarding the legal definition of marriage. The strong feelings on both sides of this issue exist not only among the public but also among members of our College.

While a position paper or policy statement by ACOG supporting medical care for all women is certainly appropriate, we caution the College against taking a position regarding same-gender marriage or making an official statement about this issue. Such a statement would be beyond the scope of ACOG's mission and would not represent the cross-section of thoughts of the members of the College.

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Michael A. Proffitt, MD
Devin L. Donnelly, MD
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REFERENCES

1. O'Hanlan KA. Health policy considerations for our sexual minority patients. *Obstet Gynecol* 2006;107:709-14.
2. Hammond CB. Time to change. *Obstet Gynecol* 2006;107:549.

In Reply:

The operational mission of the American College of Obstetricians and Gynecologists (ACOG) is "the advancement of women's health through education, practice, research, and advocacy." The College generates its guidelines for the health care of women based on scientific evidence.

Marriage is the cornerstone of American families, conferring a stabilizing, health-enhancing social framework. Federal and state marriage laws protect the health and financial welfare of children and spouses in case of death, disability, or departure of one of the spouses. More than 600,000 same-gender American families, one third of whom have young children, are denied both financial and legal protections that civil marriage affords for children of heterosexual couples. As the letter from Dr. Krupski pointed out, parents like her are bearing the responsibilities without receiving the support that other families

need and receive. Their children deserve to have their parents' commitment honored and protected in our society, not marginalized with a "civil union" or "domestic partnership."

We in ACOG expect to have our evidence-based standards of care for women accepted across other specialties. Surgeons managing pelvic masses, internists prescribing oral contraceptives, and Congress reviewing mifepristone all listen when ACOG weighs in with research-based evidence. Likewise, we must listen when America's premier mental health associations (the American Psychological Association, American Psychiatric Association, American Psychoanalytic Association, National Association of Social Workers, and the American Medical Women's Association) issue policy statements endorsing civil marriage for same-gender couples citing ample evidence that civil marriage would be good for Americans.

Access to abortion, contraception, and safer sex information for adolescents are all politically charged issues, but ACOG undertakes legislative advocacy on these issues because evidence confirms that they reduce morbidity and mortality. Legislative advocacy on these issues was never put to a vote by ACOG membership, but is decided by committee, based on scientific evidence.

Marriage has changed over the centuries. Polygamous marriage in biblical times has evolved into the modern day monogamous institution. In America, marital rape and domestic violence are now illegal. People of different races may marry. Each of these advances in human rights was controversial at first, but they prevailed because they enhanced the health of women and their families.

From Dr. Steven Sharfstein, president of the American Psychiatric Association (APA): "Clarifying the science is just one task of APA. Another is to be true to its implications. The biological basis of sexuality has important implications for civil rights. Gays, lesbians, bisexuals, and transgendered individuals are citizens who deserve the rights and benefits of full participation in society. Their children deserve fair treatment as well. Measures to improve the mental health of parents have a definite, positive impact on the children in the family. The American Psychiatric Association's endorsement of same-sex marriage is a recognition that science can forge a path toward a more decent

society. Marriage by gay and lesbian partners arouses irrational prejudice and fear, but as psychiatrists, we must take a stand on issues that have a clear impact on the mental health of our patients and of persons in the community at large. As an organization, we seek also to promote human rights and freedom from discrimination. Psychiatry leads the way for the rest of medicine on this important issue."¹

Regardless of our personal or religious belief systems, we in ACOG must endorse civil marriage for same-gender families because it supports ACOG's mission: the health of women and their families.

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REFERENCE

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In Reply:

Thank you for the opportunity to review the letters by Dr. Krupski and Drs. Olsen, Proffitt, Donnelly, and Gordon. I appreciate both positions. I understand Dr. Krupski's perspective and note her statement that "civil marriage would provide our family with protections in case of my disability or death, secure their inheritance, and give my children the important reassurance that their family is part of the great diverse fabric of America." Dr. Olsen and colleagues focus on supporting the protection of women and their right to health care services and expanding understanding of our patients. However, I do take some issue with the concerns they espouse regarding my support of equal access to civil marriage. I am well aware of the diversity of opinion in the United States regarding the legal definition of marriage, and I agree that strong feelings exist on both sides of this issue. However, the last sentence in the third paragraph of my editorial reads, "We should all support *at least* civil actions to provide true equity [legal and financial], if not actual contracts of marriage" (emphasis added). In light of the diverse opinion that exists regarding marriage between lesbians, I have tried to provide a middle of the road position.



I think the debate about lesbian marriage will continue, and I personally would give it my support. However, I am also a realist and know that it may not be time for that to come to pass.

I hope this clarifies my position and hope that it helps spur further changes in the College to achieve true equity for these individuals and their families.

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A Rare Case of Precoccygeal Endometriosis

To the Editor:

We wish to comment on the discussion by Micha et al¹ regarding the pathogenesis of precoccygeal endometriosis. The authors hypothesize that their case of precoccygeal retroperitoneal endometriosis "is a result of lymphatic dissemination but recognize that there are insufficient data to support this conclusion." Lymphatic dissemination does seem to offer less than a satisfactory causal explanation, considering that endometriosis is an uncommon pathologic finding within lymph nodes.² Furthermore, while angiogenesis within a lymph node may be sufficient to support attachment and sustain the basic viability of an endometriotic metastasis, it is difficult to imagine angiogenesis within a lymph node sufficient to support formation of a 2.3-cm endometriotic menstrual cyst, let alone the serendipitous formation of two 2.3-cm endometriotic cysts side by side, each within its own lymph node. Finally, no lymph nodal tissue was described in the pathology specimens.

However, we believe the authors provided sufficient and necessary evidence to support a theory of pathogenesis of twin precoccygeal retroperitoneal endometriotic cysts from embryonic müllerian rests. We postulate that the patient of Micha et al presented with two congenital anomalies of müllerian origin: a double uterus that was reconstructed in 1984 and "2 small 2.3-cm lesions in the precoccygeal region" demonstrated by magnetic resonance imaging in December 2004. We suggest abnormal cell migration combined with abnormal apoptosis as the underlying mechanisms for this patient having two separate müllerian anomalies. We postulate that during embryogenesis, tissue migrating caudally from the two urogenital ridges was dis-

placed to the precoccygeal region to form two müllerian rests, embryonic rests whose structural viability and limited menstrual capability was sustained by sufficient vasculogenesis. Finally, failure of apoptosis resulted in persistence of both the uterine septum and twin precoccygeal endometriotic cysts.

We would like to ask the authors if they identified other congenital anomalies elsewhere in the body or in the pelvis, such as pelvic peritoneal pockets, medial displacement of the ureter(s), or a large recess in either broad ligament, a recess capable of cradling an ovary. Photographs and illustrations of the lesions we are inquiring about may be found in Batt et al³ Regarding scientific theories, Stephen Jay Gould wrote, "Science advances primarily by replacement, not by addition."⁴ In that positive and collaborative spirit, we suggest that the theory of embryonic müllerian rests—müllerianosis⁵—offers a more robust explanation for the pathogenesis of twin precoccygeal retroperitoneal endometriotic cysts than does the theory of lymphatic metastases.

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In Reply:

In response to Batt et al's comments regarding the pathogenesis of our previously reported patient with precoccygeal endometriosis, we appreciate the suggestion that the anomalies were congenital and müllerian in origin and probably not due to lymphatic spread. We acknowledge that the hypothesis is both interesting and equally plausible. However, despite the rare incidence of endometriosis spreading via lymphatic channels or hematogenously, there is evidence of this in the literature,¹ and we have seen some cases in our clinical experience. The authors' comments are even more notable considering the case reported by Garavan et al² who indicated that müllerianosis can confound the differential diagnosis since primary and secondary vesical lesions arising from endometriosis may be difficult to distinguish.

Batt et al inquire if we had identified additional congenital anomalies, particularly in the pelvis, pelvic retroperitoneal pockets, or broad ligament. In response to the question, we were unable to identify any additional congenital anomalies. However, it is conceivable that endometrial tissue was displaced during the patient's metroplasty for uterus didelphys. Dhall et al³ reported on the outcome of a patient who presented with abdominal endometriosis 4 years after hysterectomy and tubal ligation. Further evaluation revealed another nodule in the abdominal wall and bladder endometriosis.

In the present study, it is possible that the tissue did not undergo apoptosis and infiltrated the peritoneum through the initial incision. However, we recognize that this hypothesis would require an additional step for the endometrial tissue to become retroperitoneal. Again, we appreciate the interest and insightful comments regarding our manuscript.

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Letters to the Editor

Letters posing a question or challenge to an article appearing in *Obstetrics & Gynecology* within the past 8 weeks will be considered for publication. The Editor may send the letter to the authors of the original paper so their comments may be published simultaneously. Letters that raise new or controversial issues of interest to readers of this journal will be considered for publication on an individual basis.

Following are formatting and submission guidelines:

- Disclose any financial associations or potential conflicts of interest.
- Limit the letter to a maximum of 400 words, including signatures and references. Provide a word count.
- Include the title of the article and the full names of all authors.
- Designate a corresponding author and provide address, telephone and facsimile numbers, and e-mail address.
- Fax signed copies of both the author agreement and conflict of interest forms to the journal office (202-479-0830).
- E-mail the text to obgyn@greenjournal.org. (Do not use the Editorial Manager™ system to submit letters.)



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