

Surgical Decision-Making in Pediatric and Adolescent Gynecology: Just Because You Can, Doesn't Mean You Should



Surgical decision-making is complex. It is among the most important things that we practice as surgeons, and among the most important skills that we teach our resident trainees. Surgical decision-making involves considering many factors beyond whether the procedure can technically be performed. We also consider whether the evidence and our current state of knowledge provide sufficient information to indicate that a given procedure is the most appropriate one for our individual patient. Still, we need to ask, should the procedure be done. Searching PubMed for discussions of the could and the shoulds of surgical procedures, a number of references can be found, many with the conclusion that “Just because you can, doesn't mean you should.”^{1–3} Technically feasible procedures should not always be performed. Sometimes there just is not yet sufficient evidence to justify the procedure, and sometimes, we might make the judgement that the procedure is not the correct procedure for an individual patient. The decision-making process for an individual patient can be challenging, ethically. In weighing surgical recommendations, we consider the ethical principles of patient autonomy (and parental autonomy for our younger patients), beneficence, nonmaleficence, and distributive justice.

I have recently served a term on the American Congress of Obstetricians and Gynecologists (ACOG) Committee on Ethics, and the committee discussed principles related to a number of issues including patients' requests for elective surgery. Shared decision-making is a routine component of our interactions with our patients, but this is sometimes challenging. In recent years, many of us have seen adolescents with perfectly normal labia who have become convinced that their labia are “too large.” These teens might have seen internet images promoting plastic surgical “labial beautification,” or pornographic air-brushed images suggesting that there is a “normal” appearance, as opposed to the reality of the very wide range of normality celebrated by such online references as the Labia Library⁴ and an article from *Scarleteen*.⁵ The ACOG Committee Opinion on Breast and Labial Surgery in Adolescents from the Committee on Adolescent Health written with the North American Society for Pediatric and Adolescent Gynecology Past President and *Journal of Pediatric and Adolescent Gynecology* (JPAG) Editorial Board Member Julie Strickland concluded that “labiaplasty in girls younger than 18 years should be considered only in those with significant congenital malformation, or persistent symptoms that the physician believes are caused directly by labial anatomy, or both.”⁶ The ACOG statement, and an even more strongly worded statement from the British Society for Paediatric and Adolescent Gynaecology, concluding “there is no scientific evidence to

support the practice of labiaplasty and, for girls under the age of 18 years, the risk of harm is even more significant,”⁷ clearly support “just because you can, doesn't mean you should” with regard to surgical decision-making around labial surgeries.

Those of us who provide gynecologic care for girls with complex and rare uterovaginal anomalies face the challenges of defining the individual patient's anatomy, reviewing the literature for possible surgical approaches, and assessing the evidence supporting such approaches, explaining and translating this information to our typically young teen patient and her family, and assessing other factors that affect risks of surgery (such as comorbidities). As a part of shared decision-making with our patients and families, we asked a number of questions. What is the patient's goal of surgery? It might be relief of pain associated with a reproductive track obstruction; it might be preserving reproductive capacity; it might be to achieve “normal” anatomy—whatever that means in a young teen's mind. As surgeons, we ask ourselves how realistic are these goals? For an adolescent with uterovaginal agenesis, we are not currently able to offer her the option of a uterine transplant, nor would that guarantee her the ability to carry a pregnancy to term. Perhaps uterine transplant will someday be an option, but not today for a young teen. We do not yet have sufficient evidence to make this recommendation. Much has been discussed and written about the ethical issues surrounding uterine transplants, and the current experimental nature of this procedure requires that it be limited to adults.^{8,9}

However, before we present options to our patient with a complex genital anomaly, it is important that we get to know her, to listen to her concerns and those of her parents, and to address the issues of concern to them in the best manner that we can with the best evidence that we have available. We individualize our recommendations, on the basis of all of the factors that I've noted, including the ethical considerations. We assess our own surgical skills, we carefully scrutinize and analyze the medical literature, and then we will reach a point where we explain to our patient and her family what we would recommend as surgical therapy. We discuss how our assessment fits with her goals.

I address these questions because in this issue of JPAG, Fouad and colleagues describe “Uterovaginal anastomosis for cases of cryptomenorrhea due to cervical atresia with vaginal aplasia: benefits and risks.”¹⁰ They describe a case series of 5 patients with cervical atresia and vaginal agenesis. Congenital cervical atresia is an extremely rare anomaly, estimated to occur once in every 80,000–100,000 live births, and its association with vaginal aplasia is even more uncommon. At the time of laparotomy in the 5

patients reported in this series, pelvic endometriosis was found in 80%, ovarian endometriosis in 60%, and at least a unilateral hematosalpinx in 80%. One patient had a 6-cm endometrioma; 80% had pelvic adhesions. Because of these significant findings, fertility outcomes would not be expected to be optimistic. Surgical outcomes at 1–3 years of follow-up in this series included 1 patient with occlusion at the uterovaginal anastomosis site, and 3 cases with low vaginal stenosis. One patient had a 2-cm rectal injury at the time of her original surgery for neovaginal creation. Pregnancy outcomes were not assessed, because of the young age and lack of sexual activity. Previous reports of attempts to preserve the uterus when the cervix is absent or not patent, with canalization and creation of a fistulous tract or anastomosing the uterus to the introitus or lower vagina have included multiple cases of sepsis (including deaths from sepsis), severe pain, closure of the tract, and the need for multiple repeat surgeries, leading many authors to recommend hysterectomy in these rare cases.^{11–13} One has to ask the question: how valuable is re-establishment of menses, and at what price does it come, with what likelihood of “success,” and does the definition of success include merely a patent outflow tract, or does it include a reasonable possibility of achieving a pregnancy.

Although JPAG has published the case series from Fouad and colleagues to provide information to gynecologic surgeons who care for these rare patients, I personally will await further evidence of outcomes before I conclude that just because patency can be established in the case of cervical atresia and vaginal aplasia, that the surgery should be performed.

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