

# Colorectal endoscopic submucosal dissection: I did but now I do not



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At an early point in my career, I ended up taking on a role of being the senior member of our interventional endoscopy group in addition to serving as the clinical leader for the entire gastroenterology practice for the health system. At the time, I had spent 2 years performing endoscopic submucosal dissection (ESD) in clinical practice (the majority being colorectal ESD) and had a growing referral base for these procedures. However, like every other interventional endoscopist, my two junior partners were both interested performing ESD, per-oral endoscopic myotomy, and other third-space endoscopy procedures. In addition, my increasing administrative responsibilities required me to dedicate more time to administrative work and decrease the amount of time I spent in the gastrointestinal endoscopy lab. It was this culmination of events that prompted me to sit down and think about what I would do moving forward. Continue to perform colorectal ESD or not? That was the question.

On first thought, there were a lot of conflicting issues that came to mind. I had spent considerable time learning ESD and improving my technique on live cases over the past 2 years. Was that a time investment that I was willing to throw away? I was only 34 years old at the time and was worried about losing a skill that I might need later on in my career, which was just starting and could last another 30 years. Was I setting myself up to be a technologically obsolete interventional endoscopist? Both of my junior partners wanted to also perform ESD. Did we really have the volume at our center to justify having three physicians perform this procedure? Could all three of us truly perform high-quality ESD if we were splitting the total cases amongst the three of us?

Beyond the concerns about my personal career and that of my two partners, I was also beginning to struggle philosophi-

cally with the role of colorectal ESD from a medical standpoint. Was I really impacting patient outcomes with performing colorectal ESD instead of other resection techniques in the West, like piecemeal endoscopic mucosal resection (EMR) and the newly developed endoscopic full-thickness resection (EFTR)? Sure, I was getting more en bloc resections endoscopically, but was I really preventing more cancers or reducing overall mortality compared to my practice before I started doing ESD? With less risk of recurrence at the resection site with ESD, maybe I was reducing the frequency of surveillance colonoscopies these patients needed. But I noticed that I really hadn't changed my surveillance practice much because of the number of additional adenomas for which these patients were at risk.

After a long period of thought and self-reflection, I made the smartest decision of this entire process. I asked some colleagues and close friends for advice. This advice led me to a few core principles that helped me guide my personal decision to stop doing colorectal ESD. I don't expect every interventional endoscopist asking themselves the same questions to reach the same decision that I did. But rather, I hope these principles serve as the same words of wisdom to help guide a decision as they were to me.

## Do what you're passionate about

Colorectal ESD requires a significant commitment in order to successfully perform this procedure in a high-quality manner. Significant time is needed to learn the procedure before starting human cases. Additional time investment is needed to perform these procedures, especially during the early experience, compared to other endoscopic procedures. In the United States, there is a lack of a clear and robust reimbursement pro-

cess for this procedure. Combined with the additional procedure time, this can make colorectal ESD a financial liability for performing physicians with regards to how they spend their hours of work. These procedures also carry higher procedure risk compared to standard endoscopic procedures, which can lead to higher stress for endoscopists.

When you think of all these investments (time, money, stress), one wonders why would anyone want to do colorectal ESD. The answer is “passion.” Like anything in life, if you are passionate about doing colorectal ESD, then these factors become minor in comparison. On the other hand, if you are not passionate about colorectal ESD, then these factors will feel like the death by a thousand knives during every case you do. In our current era of increasing problems with physician burn-out, identifying what we are truly passionate about and trying to maximize our time in that area may be a key to a sustained state of fulfillment. After self-reflection, it was clear to me that I was no longer passionate about colorectal ESD and instead had found interests in other things.

## Just because you can, doesn't mean you should

As interventional endoscopists, our brains are wired to be on the forefront of medical technology. We constantly want to do new things, things that we haven't done before, and explore the unknown of endoscopy. While this can often be considered scientific “progress,” true “progress” is also understanding when not to do something. With regards to colorectal ESD, I wonder whether we have found “true progress” in the manner in which we are implementing this technique. ESD helps us generate more en bloc resections and may also help us generate more en bloc resections of select T1 cancers that may reduce the need for surgery in these patients. But compared to EMR, it comes with a higher learning curve, higher risk for complications, and longer procedure time. So, it's worthwhile to take a closer look at the value of colorectal ESD.

For colon adenomas, the potential value of ESD over EMR is that a higher en bloc resection rate would result in lower risk of recurrence and therefore a reduced need for surveillance colonoscopies. But we need to determine the true magnitude of this potential value. The quality of EMR being performed gets better with every generation of endoscopists. Those learning colonic EMR today get to learn from the mistakes and experience of their predecessors who had to pave the way in creating a new technique on their own. So EMR may be associated with a reduced risk of recurrence as we get better at the technique. In addition, these patients are likely to be at high risk for additional adenomas in the future, so will we be able to safely reduce the frequency of surveillance colonoscopies? The incremental value of colonic ESD for adenomas may not be worth the additional procedural risk, time, and learning curve.

For early (T1) cancers, a select group of these lesions can be cured by en bloc endoscopic resection, eliminating the need for surgery. It makes complete sense to perform ESD for these suspected early cancers when it does not look like they can be reli-

ably removed en bloc by EMR. However, we now have a competing technique that could be applied to these patients: endoscopic full-thickness resection (EFTR). If a lesion is amenable to both ESD and EFTR, which is better? These are the questions that we will need to answer if we are going to achieve true “progress” for our patients.

## Patient-centered care is not provider-centric

As I debated the above issues in my head about what role colorectal ESD was playing in my ability to care for the community I served, I often thought about whether I was practicing “patient-centered care” or “provider-centered care.” I had been performing colon ESD for 2 years, but as I looked back at my experience, I wondered how many of those lesions I could have just removed by piecemeal EMR and the patient would've had the same exact outcome. It was a hard realization to make, but I felt in retrospect that the number was higher than I would've liked. How many times have any of us as interventional endoscopists blurred the line about doing something novel and new because we wanted to do it for some internal desire to do a new thing? We justify it in our minds and to the patient that it's the right thing to do. But are we internally biased in our judgement because we want to do the new technique or use the new technology? If we as a medical society are going to transform healthcare into a service that is truly patient centric, we need to take some hard looks at ourselves and see how many things we do because we've in reality prioritized ourselves or our own desires ahead of those of the patient.

For colorectal ESD, the patient-centered decision we have to make is an assessment on how many patients in the community we serve truly will benefit from it. We then must recognize that the community only needs a certain number of endoscopists to perform that service. We all can't do colorectal ESD. Our community doesn't need 10 endoscopists doing 10 colorectal ESDs a year. That's not patient-centered, that's provider-centered. Our community would be better off having two endoscopists do 50 colorectal ESDs a year. That's truly patient-centered.

## Leading others comes with some personal sacrifice

As physicians, some of us have a perception that leadership positions are a reward or a recognition for our clinical or research expertise. However, physician leadership positions are really meant to function like leaders in any other industry. Great leaders are not known for their personal accomplishments, but rather the accomplishments of their teams. When I first was asked to serve in a leadership capacity, I was given a mission from my new boss, the chief medical officer. He said “to be successful as a physician leader, you need to help support all the other physicians around you so that they become as good, if not better physicians than you are, without doing the clinical work yourself.” It was a hard mission. I had to decide to give

up time doing something that I enjoyed (performing endoscopy procedures) in order to help others be better gastroenterologists.

As the new leader of a team of young interventional endoscopists, I had to approach leading this team with that same philosophy: to be a “servant leader.” In other words, I had to do what was best for the team as a whole, even if that wasn’t what was best for myself as an individual. When it came to leading our team of three interventional endoscopists, we all couldn’t do colorectal ESD. We didn’t have enough cases per year to sustain three physicians doing it and the care needs of the community didn’t have the cases either. Like any other successful team, we needed to have team members with a variety of complementary skills and not competing skills. As a sports fan, I found advice in the experience of some of the great coaches and athlete leaders in basketball and football history. I had to instill a culture of “team before I.” So I took the example of my favorite athlete leader from childhood: Michael Jordan. Jordan was a great basketball player, but his team never succeeded in the playoffs until he learned how to pass the ball to his teammates and make them better players. With this in mind, I took the first step in setting an example for the rest of my team that the team was really more important than one individual. I passed the ESD “ball” to my teammates. The two of them took

that example and decided themselves to split up who would do ESD and who wouldn’t. In essence, they saw that we all had to put “team before I” and the team became stronger because of it.

## And then what?

It’s been almost 3 years since I’ve stopped doing ESD. I don’t regret my decision. If anything, the more time goes on, the more I am reassured that I made the right decision for myself. I’ve spent the time trying to focus on the things that I am truly passionate about and on being a good leader putting the team first. As you read this, I hope you find my experience valuable. I don’t mean this to be the only way to think about ESD or as a call for everyone to stop doing ESD. Rather, I hope the words of wisdom help each of you find what’s right for you, your own team, and the community you serve.

## Competing interests

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None