Transcript Details
This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/gi-insights/the-role-of-emerging-technology-in-gi-practice/3599/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

The Role of Emerging Technology in GI Practice

LASTEST CLINICAL ISSUES, TRENDS, AND TECHNOLOGIES IN GASTROENTEROLOGICAL PRACTICE

You are listening to ReachMD XM-157, the channel for medical professionals. Welcome to GI Insights where we cover the latest clinical issues, trends, and technologies in gastroenterological practice. GI Insights is brought to you by AGA Institute and sponsored by Takeda Pharmaceuticals North America.

You host for GI Insight is Professor Of Medicine at University of Illinois Chicago, Dr. Jay Goldstein.

Welcome. New technological and therapeutic platforms are being developed for endoscopy. It is not just diagnostic endoscopy anymore and the future is bright for more advances over time. Joining us to discuss emerging technologies that will shape the future of GI practice and endoscopy is Dr. Jay Pasricha. Dr. Pasricha is Chief Of Gastroenterology and Hepatology at the Stanford University School of Medicine.

DR. JAY GOLDSTEIN:

Welcome to ReachMD. What are the most important developments that are occurring now in therapeutic endoscopy and what is the future hope for us.

DR. JAY PASRICHA:

Thanks Jay. This is an exciting time to be in Gastroenterology and Gastrointestinal Therapy. Perhaps, the most exciting recent development has been in the area of NOTES, which is an acronym for natural orifice transluminal endoscopic surgery in which the endoscopist and the surgeon actually breaches the wall of a GI or other visceral organ and enters the peritoneal cavity from inside instead of an incision from on the skin.

DR. JAY GOLDSTEIN:

Well, that is kind of an interesting thought, because in the past we never wanted to breach the gastric wall, did we?

DR. JAY PASRICHA:

That's right. That was an age-old dogma when you and I were fellows, we were taught that was a thing to avoid at all costs.

DR. JAY GOLDSTEIN:

Yes, now we are doing it on purpose.

DR. JAY PASRICHA:

We are doing it on purpose and <_____> actually very sound experiments that have been done and first performed almost 10 years ago now and have finally led to a worldwide consortium organized by some of the GI societies in which we are actually monitoring the patients who have undergone NOTES or NOTES-related procedures.

DR. JAY GOLDSTEIN:

So, our listening audience is very enthusiastic about NOTES and we have heard a lot about it. Why would someone want their appendix taken out by you rather than a surgeon.

DR. JAY PASRICHA:

Well I didn't say somebody wanted to take their appendix out by me. I think that what you raised is a very, very interesting question, somewhat controversial, but it clearly brings to focus what the future for gastroenterologists may well be. On the one hand, you could take the position that gastroenterologists should get trained since this is going to be a flexible endoscopic procedure and who better to do flexible endoscopy than gastroenterologist. On the other hand, you can argue and many have argued that gastroenterologists are not trained as surgeons and what we are talking about is a surgical procedure regardless of the tools that you use to perform the procedure. So, we are at a point in time where there is going to be some push and pull between 2 specialties as to who gets to "own" the space. But, I do not think this is a situation that will last for very long and by that I mean for more than 10 years because I think NOTES is going to pave the way for true hybrid specialists, one that we have been taking about for many years, but will finally come due to shape.

DR. JAY GOLDSTEIN:

Let us talk practicalities. My first question to you is a little tongue-in-cheek, but let me phrase it. In year 2008, where would NOTES play a major role, a useful role in interventions for patients, liver biopsies, lymph node biopsies, where are people using this most commonly.

DR. JAY PASRICHA:

The killer application for NOTES are completely wrong term to use in the setting is not known. What we do not know or we have not proven yet is that NOTES offers any real advantage over conventional laparoscopic surgery other than the obvious one which is cosmetic and the funny part is that it is actually the cosmetic advantage that seems to be driving the procedure. There are reports that many patients if asked would prefer a completely scarless procedure over one that just even one that takes only a few incisions or small incisions like laparoscopic surgery. So, that is part of what is driving it and they are now over 300 cases that have been recorded worldwide. Most of the cases have been done transvaginally, although some have also been done transgastrically and the most common indications have been a cholecystectomy actually. So, I can't answer the question in a definitive way. I can tell you that we are still in a phase where we are waiting to see what the exact application is going to be that offers a major advantage over a laparoscopic approach. Part of the problem of course is that we cannot do a fair comparison between the 2 procedures or the 2 approaches because the tools for performing NOTES just aren't there and will takes us another 3-5 years to get those tools and be able to perform a meaningful comparison.

DR. JAY GOLDSTEIN:

Is this going to be as you see this role out, will this be an academic center type procedure or you really think that in years to come, we will be seeing this in community-based programs.

DR. JAY PASRICHA:

I think in the beginning there is no questions this will be an academic medical center program, although there is a lot of interest amongst community surgeons to get involved in NOTES. Gastroenterologists, particularly community gastroenterologists are generally taking far more conservative approach to this than I would have expected. They are essentially saying this is too radical, too far out, takes too much time, too risky, I'd rather not mess with this.

DR. JAY GOLDSTEIN:

That will prevent us from moving forward, isn't it.

DR. JAY PASRICHA:

Well you know the danger is that, and I do not want to phrase this in terms of turf or I really think that gastroenterologists right now are far too complacent about the specialty because of the blooming business in screening colonoscopies that they may have made themselves very vulnerable to any changes in that procedure and if screening colonoscopy was to go away, we are not left with very many other procedures to perform and if we give up therapeutic flexible endoscopy as well then you know.

DR. JAY GOLDSTEIN:

What are we going to do?

DR. JAY PASRICHA:

Actually talk to the patients.

DR. JAY GOLDSTEIN:

Ya baby so. Actually, it <_____> do not put all your eggs in 1 basket isn't it?

DR. JAY PASRICHA:

That is right.

DR. JAY GOLDSTEIN:

If you are just tuning in, you are listening to GI Insights on ReachMD XM-157, the channel for medical professionals. I am your host, Dr. Jay Goldstein and joining me today to discuss emerging technologies that will shape the future of GI practice in endoscopy is Dr. Jay Pasricha, chief of gastroenterology and hepatology at Stanford University School of Medicine.

Let us move on a little bit to natural orifice surgery, NOTES, as you call it. When I trained in gastroenterology, my chief told me that at one time in the future there is going to be a continuum between gastroenterology and general surgery. I never thought he was right, but I think he is. Do you see that kind of change in the training programs in the future?

DR. JAY PASRICHA:

I think that changes are coming, you Peter <_____> predicated creation of a hybrid specialist 10 or 15 years ago and at that time we thought it was around-the-corner, but it took the advent of procedures like NOTES to finally blur the distinction between what an endoscopist does and what a laparoscopic surgeon does. The problem is that the skill sets that a surgeon has are quite different from the skill sets of the gastroenterologist and in the interests of best patient care, we do require fusion of some of those skill sets and that will require changes in our training pattern. We need to train people not just procedurally so the surgeon today has to go beyond the 50

or so odd, flexible endoscopy procedures that are required as part of the 5-year program. They have to become really very adept at flexible endoscopy just the way gastroenterologists are and at the same time, I think they are going to have to acquire much more of the cognitive knowledge for taking care of GI patients. Gastroenterologists on other hand have to be trained in taking care of a much higher, much more complex level of procedures than they are currently doing if they are going to perform NOTES. So, I do think either one of the training programs today really meets the need for the future and this will require reinvention of the so called digestivist. There are some programs that are beginning to talk about this already and I think in the next few years, we will see some tentative moves toward that, of course, pushing back against this will be the inertia in the system particularly the ACGME requirements and need for revamping the curricula, but I think in the interests of better patient care, we do need to rethink how we are training people to take care of digestive diseases.

DR. JAY GOLDSTEIN:

This is very, very interesting. While I look forward to that, maybe not in my career, but maybe in the next 10-15 years that will be the case. Let's turn away from NOTES for just a second. Is there anything also you would like to tell us about and about the future developments and diagnostic endoscopy, and maybe even just a colorectal cancer screening.

DR. JAY PASRICHA:

Right so. In terms of other therapeutic procedures, everything is not NOTES. In fact, we do not really know where NOTES is going to settle down in terms of the spectrum of therapeutic options, but what is clear is, has NOTES has emboldened us to be far more aggressive inside the lumen of the GI tract. So what you are going to see in the next few year is far more innovative and much more sophisticated ways of performing endoscopic maneuvers within the GI tract and this will lead to better ways to do mucosal resections, perhaps even cancers, as well as novel methods to treat obesity, and now even perhaps more exciting type 2 diabetes. So, there is going to be a whole new range of therapeutic procedures that will be amenable to flexible endoscopy even if you stay within the lumen. With regard to your other question as far as diagnostic procedures are concerned, as you know, there has been a huge amount of innovation in optical imaging and adding dimension to conventional endoscopy, we have seen that now with the introduction of confocal endomicroscopy, fluorescent endoscopy, and different kinds of computer magnification and contrast techniques, we will see lot more of these in the near future whether or not this makes a difference in our ability to discriminate between benign lesions and precancerous ones remains uncertain, but I think that with more technological developments, this is likely to happen.

DR. JAY GOLDSTEIN:

Well, I would like to thank my guest from Stanford University School of Medicine, Dr. Jay Pasricha for spending time with us today. I would like to thank you all for joining us today and especially our guest.

DR. JAY PASRICHA:

Thank you.

You have been listening to GI Insights on ReachMD XM-157, the channel for medical professionals.

GI Insights is brought to you by AGA Institute and sponsored by Takeda Pharmaceuticals North America. For additional information on this program and on-demand podcasts, visit us at reachmd.com and use promo code 'AGA'.

Takeda Pharmaceuticals North America is proud to sponsor this important and quality programming for ReachMD listeners. Takeda does not control the editorial content of this broadcast. The views expressed are solely those of the guests who are selected by the AGA Institute based in Deerfield, Illinois. Takeda Pharmaceuticals North America is a wholly-owned subsidiary of Takeda Pharmaceutical Company Limited, the largest pharmaceutical company in Japan. In the United States, Takeda markets products for diabetes, insomnia, wakefulness, and gastroenterology and is developing products in the areas of diabetes, cardiovascular disease, and other conditions.

Takeda is committed to striving toward better health for individuals and progress in medicine by developed superior pharmaceutical products. To learn more about the company and its products, visit www.tpna.com.