40 YEARS
OF INTERVENTIONAL ERCP

STORIES FROM THE PIONEERS
VOLUME 2 OF 2
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More of then, 
some of now, 
and maybe…

By Peter Cotton

I am delighted to welcome y’all to Volume 2 of 40 Years of Interventional ERCP, but unfortunately I must start with a sad note. Aksel Kruse, who we featured in the first volume, has succumbed to the cancer he spoke about. In grieving, we cherish his memory and celebrate his legacy.

In Volume 2, we feature seven more pioneers, from France, Germany and the USA. All have made their marks in innovation, teaching and practice.

We have lost two of the best, Steve Silvis and Jack Vennes, who, together in Minneapolis, gave most generously and effectively of their time to help hundreds of would-be ERCPists who flocked to their door. Marty Freeman, Michael Shaw and Chuck Rohrmann have written nice appreciations. The other pioneers all kindly agreed to be interviewed by phone. We hope that you enjoy them.

This project has been both educational and fun for me, and I thank our friends in Cook for having the idea and for supporting it generously. I have to say also that the genesis of this project fits superbly with the collegial vision that Don Wilson brought to the world of interventional endoscopy, and which benefited so many of us, and indeed our patients. It is a much tougher commercial world now than forty years ago but his example of integrity and warmth are virtues that shine ever bright.

So, forty years on. Where are we now, and where are we heading? Time to switch from retrospection to introspection.

Some people assume that folks who have seen it all must be able to forecast the future. That is certainly not true in my case. I cannot claim to have conceived any of the amazing innovations that we have recorded in these pages, but have strived to explore, evaluate and teach them quickly, as they appeared.

While we wait for new ideas, there is still much to be done in evaluating, improving and teaching what we already have. As mentioned in Volume 1, we became accustomed in the early days to assume, usually correctly, that any new ERCP procedure (e.g., stone extraction, stricture management) was much better than the surgery that it quickly replaced.

We now work in a different environment, where surgery is much less invasive and safer than ever before. ERCP treatments are still dominant in the biliary tree but their roles in managing disorders of the pancreas and the sphincters are still speculative. Much of the “research” in these areas has been of poor quality, including my own.

The journals are full of retrospective studies with errors that would fill a book chapter on bias. This is a quiet plea for our endoscopic community to collaborate on stringent prospective studies that can really answer the key questions. They are difficult to perform for many reasons, and expensive, but will be the only ones that shape future practice.

Our teaching needs just as much attention. Most of us have not changed our methods of teaching ERCP in forty years, continuing to provide simple apprenticeships with little structure or accountability. The practice of ERCP has changed substantially and is now dominated by therapeutics, and often in complex clinical contexts.

Training needs to be structured and competence measured objectively. The earlier dream of using simulators in training faded because they were unrealistic and very expensive but several inexpensive mechanical models are now available and deserve wider usage.

I have recently reissued a plea to improve our methods of measuring and ensuring competence. ERCP is unique amongst gastrointestinal endoscopies in that it is performed only in hospitals, which have systems for assessing credentials and approving privileges. Granting privileges, and their renewal, should be based on real performance data. Practitioners should keep track of their quality metrics, compare them with their peers (benchmarking), and be prepared to share them when requested with patients, payers and lawyers (the latter hopefully not too often). Those comfortable with their performance should have no difficulty sharing the data, and their practice will prosper. Patients will learn and benefit.

I mentioned in Volume 1 that we would be interviewing some of the early trainees of our pioneers to get more insight into their particular talents. We are so doing, but there is not enough room to include them in this volume. They will appear in future editions of The Channel.

Thanks for your attention, and kudos to Cook.

1Cotton PB, Cote GA. ERCP (Ensuring Really Competent Practitioners), Endoscopy 2014: 46; 922-924

Claude Liguory was and is the unmistakable face of French endoscopy. Like many of the pioneers of therapeutic endoscopy, he started in surgery but gravitated to flexible endoscopy via laparoscopy. He hosted a landmark workshop in 1972 at Henri Mondor Hospital in Paris, which brought together most of the ERCPists in the world at the time, probably all of twenty-five. Those who were there remember it well as the beginning of many friendships and for a splendid reception high on the Eiffel Tower.

Peter Cotton: Claude, welcome. When and where did you become a doctor?


Cotton: What attracted you to gastroenterology as a specialty?

Liguory: That is a good question. I started with one year of surgery but I was disappointed with surgery because it takes too long. Finally, I chose a specialty using much more the hands than the brain.

I started with laparoscopy. There was no EUS, no cholangiography. Diagnosis was made according to the color of the liver. When the liver was completely green, that means there is an obstacle of the bile duct, and we will send the patient for surgery. When the liver was brown, it was hepatitis, no surgery.

Cotton: I've never heard that before. That's very interesting.

Liguory: I did a lot of laparoscopy. Unfortunately, I didn’t think to remove the gall bladder.

Cotton: And then you started with semi-flexible endoscopes. Is that right?

Liguory: No, we had a rigid esophagoscope and a rigid bronchoscope. We had a lot of esophageal cancer and, before starting treatment, we checked if there is no compression of the bronchial system. Only with local anesthesia, we did esophagoscopy and rigid bronchoscopy in the same session. More than a thousand procedures.

Cotton: Do you think that your initial training with surgery and laparoscopy helped you when you moved to flexible endoscopy?
Liguory: The first contact was during a lecture by Dr. Oi, who was the first Japanese physician doing ERCP, at a meeting in Denmark.

Cotton: Yes, it was the World Congress in Copenhagen. How did you get started yourself with ERCP?

Liguory: I started in the department of Professor Andre Chavy in Gustave Roussy Hospital where I did my first ERCP in November of 1971. At the same time I worked in St. Antoine Hospital, where Professor Michel Conte did not believe in ERCP because of the risk of complications.

About that time I met a Brazilian doctor called Silvio Periera de Jesus, who was working in Brasilia. He invited me to give a lecture about ERCP for their National Congress in 1972. There was no ERCP in South America so this was the first ERCP in the city of Niterói. I stayed in Brazil for six weeks, linking contacts all over from the north to the south.

Cotton: You have been in Brazil many times since then?

Liguory: I have been in Brazil more than fifty times. I have a picture at a meeting in 2002 to celebrate the thirtieth anniversary of my first ERCP.

Cotton: You are very famous.

Liguory: I have received tickets in business class, sent by my Brazilian colleagues for my own 80th anniversary next November.

Cotton: Congratulations. When did you do your first sphincterotomy?

Liguory: The first was in October 1974 in a lady with a residual stone at Gustave Roussy Hospital.

Cotton: Had you seen this procedure somewhere else?

Liguory: No.

Cotton: Did you have to make your own sphincterotome?

Liguory: Yes, exactly. There was no material available in the market but we made by ourselves the papillotome using a catheter and fishing wire.

Cotton: Was there enthusiasm in Paris for sphincterotomy or some resistance?
Liguory: There was a resistance coming from surgeons; the head of the surgical unit in St Antoine Hospital, dean of the faculty, was against endoscopic papillotomy. Fortunately, on the contrary, Prof. Jacques Caroli, the famous hepatologist, was a strong supporter of biliopancreatic endoscopy. I think you remember his name. He bought a duodenoscope and asked me to teach his coworkers. He published a well-known book on the diagnosis of difficult jaundice and told me, “now my book is no longer useful because you are able to put dye in the bile duct of jaundiced patients and everything now is easier and more accurate with ERCP.”

I was obliged to leave St. Antoine hospital and moved to Cochin Hospital, where Prof. Lucien Leger was head of the surgical unit and enthusiastic for new procedures, especially endoscopic papillotomy. In his department I did the first papillotomy for acute pancreatitis in 1979 and the first endoscopic cystostomy in 1980.

Prof. Leger sponsored my election to the National Academy of Surgery in 1987 and two years later, I became Professor of the Medical College of Paris Hospitals.

Cotton: Were there other people in France doing sphincterotomy at that time?

Liguory: Yes! Prof. Jose Sahel in Marseille, and the first ERCP in France was done in 1970, one year before me, by the team of Prof. Heuilly in Nancy.

Cotton: Going back to those early days, I want to remind you of the wonderful meeting that you hosted in 1972 in Paris. I think the Olympus Company invited one or so people from many European countries. I remember being there with you, Classen, Kruse, Safrany, Osselladore and a number of other people.

Liguory: Yes, and a Japanese expert who was not able to find the papilla. Finally, I took the scope with success.

Cotton: That was a very important meeting. It stimulated so many people but it also started some friendships, which have continued forever.

As you know, this series is being sponsored by Cook Medical and we are all indebted in various ways to Don Wilson for his help. Was he helpful to you?

Liguory: Yes, yes, in many ways. He sponsored many teaching meetings where I demonstrated.

Cotton: We miss him. Are there techniques that you wish you had developed or been able to use? Do you have any regrets in your career in endoscopy?

Liguory: Yes, I have missed out on EUS because I had no time, too busy doing all other sorts of procedures, as well as ERCP.

Cotton: Claude, are you still doing procedures?

Liguory: No, I stopped in December 2007 exactly.

Cotton: This has been a lot of fun going back over the old days. We have so many things in common despite a different language. Thank you so much for your time.

Liguory: Thank you, Peter.

References:


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Laszlo Safrany came to endoscopy via hepatology and laparoscopy, stimulated by a spell at the National Cancer Center in Tokyo. As for many, he was introduced to ERCP during a visit to Dr. Ogoshi in Niigata. He moved from Hungary to Germany in 1974 and rapidly gained a large experience of ERCP and its therapeutic applications, which he shared in many teaching workshops and iconic publications.

Peter Cotton: I understand that you were born in Yugoslavia, but you grew up in Hungary. When I first met you, I think it was in 1972, you were living in Hungary at that time.

Laszlo Safrany: Yes.

Cotton: I think that we first met in 1972 in Paris at the European Congress. Was that right? You brought a bottle of Slivovitz from Hungary.

Safrany: We had a Hungarian party in the hotel.

Cotton: I remember that well. I gather that you graduated and did your medical school in Budapest. When did you become a doctor?

Safrany: 1954.

Cotton: Wow! You are even older than me Laszlo.

Safrany: I got boarded for the internal medicine in ’57. There was no gastroenterology as a specialty at that time.

Cotton: When did you first come across endoscopy?

Safrany: I started in hepatology, and made the laparoscopy, learning from a book. Nobody made it before me and, during the first procedure, I was so nervous that I collapsed.

Cotton: What about gastroscopy?

Safrany: First, I used a so-called semi-flexible instrument.

Cotton: Also without any teaching?

Safrany: There was a gentleman who showed me how to do it and I did it, but it was a horrible procedure for the patients.

Cotton: Then you went to Japan! How did that happen?

Safrany: There was a scholarship for a young Hungarian guy who makes endoscopy and speaks English. I was the only one who made the gastroscopies and so I got the scholarship.

Cotton: You spent three months in National Cancer Center, is that right?

Safrany: Mr. Shimoyama, who became in the meantime the general manager of Olympus, made it possible for me. I went to Nagoya to Mr. Kasugai’s unit. They were mainly interested in the early diagnosis of gastric cancer but the scope of my interest was to learn ERCP. So I went to Niigata, to Drs. Ogoshi and Hara in December 1970.

Cotton: I spent two weeks there with Dr. Ogoshi in 1971 and I have kept in touch with him ever since. He came to one of my meetings in Charleston two years ago. He is retired now but seems healthy and we enjoyed seeing him again.
He developed the first duodenoscope with Olympus at the same time that Dr. Itaru Oi was developing one with the Machida Company.

**Safrany:** He was also a good friend of us.

**Cotton:** So you took the technique back to Hungary. Was there any difficulty getting a duodenoscope in Hungary?

**Safrany:** When I came back in February, an Olympus instrument was on my table in my room. Then I started to do it in Hungary and soon I was teaching others. Mr. Shimoyama asked me to make demonstrations in the Soviet Union.

**Cotton:** Let’s move on now to the first sphincterotomy. When did you hear about that and what did you do about it?

**Safrany:** Everybody knows that the stones, which we touch with our diagnostics catheter, they must come out. Once I had a basket, but I did not know that it is necessary to cut the papilla, and I cut the basket and it got stuck.

**Cotton:** You didn’t do any sphincterotomy in Hungary?

**Safrany:** In Hungary I didn’t. There were many reasons. My boss was against all endoscopy and biopsy methods. He told me that classical physicians had to find out ways of the clinical side, laboratory findings and speculative diagnosis.

**Cotton:** Then you moved to Germany. Where to and when?

**Safrany:** I went on my 45th birthday, the 22nd of March 1974. Prof. Demling from Erlangen got in contact with the professor of surgery in Münster. He knew how important it was for a surgeon to have endoscopy available. He supported me and I had a huge number of examinations.

**Cotton:** That’s where you did your first sphincterotomy? Did you have to make your own sphincterotome?

**Safrany:** Yes, I made them myself, but had big problems. The bare wire penetrated my finger once and they almost had to amputate it.

**Cotton:** Oh dear, but you got sphincterotomy going, in 1973 or 1974?

**Safrany:** May of 1974. I soon had a big series because I was supported by the chief of the surgical department, Prof. Bünte.

**Cotton:** In 1974 there must have been very few places in the world doing sphincterotomy. I didn’t start until the next year, 1975. I don’t think anyone in the United States was doing sphincterotomy until 1975. Is that right?

**Safrany:** Well, I got a call from New Orleans in December 1974 asking if I could make a sphincterotome for a patient with cholangitis. So I took a flight to New Orleans and did the procedure.

**Cotton:** That must have been the first sphincterotomy in the United States. You moved hospitals at some time, didn’t you?

**Safrany:** To Wilhemshaven, yes, where we made some live demonstrations. It was 1980 during the first congress in Hamburg and I spoke to Classen and Demling and they said, “Okay, do it.” A lot of people came.

**Cotton:** You did some of the very early publications on ERCP. I remember that we collaborated on a big survey of using ERCP in patients with jaundice that was published in 1973. Although at that stage it was not called ERCP, right? It was called a number of different things. You remember that we were together at the World Congress in Mexico City in 1984, and that’s when we agreed that it would be called ERCP. We have the picture of the group of us together.

You were the first one to write about sphincterotomy in patients with gallstone pancreatitis.

**Safrany:** You wrote the article and you put me as first author, and published it in *Surgery*. Later, the subject has been discussed repeatedly over twenty years and nobody mentioned us.

**Cotton:** That’s the way of the world, Laszlo. Trainees today never read anything that’s more than five years old. They reinvent things all the time. They describe the first this, the first that, after it has been described several times before. That’s just me getting old and crotchety.

I would like to take you back to one or two other things. One of the other breakthroughs was stenting. When did you get involved with that?

**Safrany:** I think it was ’80 or ’81. Nib Soehendra came to my place. I had scheduled a patient and he made a double pigtail stent. He took a roll of tubing from his pocket, and a knife, and made the stent. Without sterilizing it.

**Cotton:** Well, hush, we won’t talk about that. Let’s move forward now from those early days.

**Safrany:** You may not know that I was invited to North Carolina, to Duke University, by Mal Tyer. That was in 1973.
Cotton: I stood on your shoulders later. I didn’t get to Duke until 1986. Obviously you’ve pioneered many things. Are there other areas that we haven’t touched on?

Sáfrány: I was the first to do ERCP in patients with Billroth II gastrectomy. It was not a big deal, but no one else had the idea.

Cotton: Nowadays not so many people are still alive with gastrectomies, but we now have many patients who have had surgery for obesity, with bypass procedures, which make ERCP extremely difficult. I am glad that I am no longer performing ERCP. When did you do your last ERCP?


Cotton: Do you live in Spain now?

Sáfrány: I live in Munich and Spain. By the way, I sit now and in front of me is Gibraltar with my garden, swimming pool and we have a beautiful golf course. And I do love to go fishing.

Cotton: I think the first time you had a golf club in your hand was with me in Singapore at the Shangri-La Hotel. It is built over now, but they had a little golf course then. You said, “I can do that,” and I think you beat me the first time you ever played golf.

Okay, Laszlo, this has been a wonderful discussion. Thank you so much. Bye for now.

References:


Jerry Siegel grew up in the Southern US, but has been known for decades for his prominence as one of the primary ERCP protagonists in New York, not without some resistance in the early days. He made his own accessories and blasted his own path. He is one of the few ERCPists who have received the highest honor of ASGE, the Rudolph Schindler Award.

Peter Cotton: Welcome, Jerry, thanks for your time. To start, please give me a brief history about where you grew up and how you became interested in medicine.

Jerry Siegel: I grew up in Atlanta, Georgia, went to the public schools there. I attended Emory for a short period of time and then there was a thing called the Korean conflict. I transferred to pharmacy school at the Southern College of Pharmacy, which became part of Mercer University. Of course, you heard of Mercer this past year with the NCAA [Tournament] against Duke. I did play basketball for them. I got my pharmacy degree in 1954 and still deferred for the conflict in Korea because of my academic achievements. I knew I would be drafted at some point, so I went on to the University of Georgia in Athens and completed another degree in chemistry in 1956. And while I was there, I met Beverly. We began dating and we married.

Cotton: I knew you were smart, but I didn't realize you had all those degrees.

Siegel: Yeah, right. I was accepted to the Medical College of Georgia, as you know, in Augusta, and was there 1956-60. Then I moved north for internship to Allentown Hospital in Allentown, Pennsylvania. Beverly and I had a child, and internships in those years didn't offer much in terms of stipend. The rotating internship offered an apartment plus maybe $220 a month.

In 1961, after completing my internship, I accepted a commission in the Air Force and became a flight surgeon, so I went to the School of Aerospace Medicine in San Antonio and then completed my two years at Luke Air Force Base in Arizona, which is in Glendale. I then accepted a residency at the Veteran's Administration Hospital in The Bronx, New York. At that time it was affiliated with Columbia Presbyterian. We had to make a choice. At that time residency was three years, one year of which would be in a specialty, if you so chose. I chose gastroenterology.

Cotton: Why did you do that?

Siegel: One of my attendings, Herbert Hyman, would walk around with this machine gun case and he said he was doing endoscopy. Herbie took care of me, took care of our family and I followed him. That was 1960-61. When I came back to New York to the Bronx VA, Dr. Julius Wolf was the director of medicine but he was also a gastroenterologist. In those days they didn't have much in terms of endoscopy but we did peritoneoscopy of all things and really extended our necks by doing biopsies. That was in the same room where we did sigmoids. Julius Wolf had two wonderful attendings from Columbia, Henry Colcher and Charles Flood.

Cotton: Those are good names.

Siegel: Charles was a founding member of ASGE. He also became president of the ASGE and the ACG, and also was a Schindler awardee. He and Henry Colcher were also founding members of the New York Society. It was exciting in that third year when I took up my GI because Henry would come over with a 16 mm movie camera. He said you really had to see this in real time; you can't just take a photograph. At that time the Olympus gastro camera was out and then there was an Olympus endoscope that had a cassette at the tip of the scope so that you could take photographs.
Cotton: Right, that was the GTFA.

Siegel: And, of course, these were just gastroscopes. You really couldn’t see the esophagus and you couldn’t go into the duodenum. Of course, we used a Hirschowitz endoscope. Because Henry was taking these movies, we would have to change the incandescent bulb every case. That was in 1965.

I finished up training and accepted a position with a cardiologist in Atlanta in 1966. He wrote the textbook on the EKG. The name was Bernie Lipman. My training also included radiographs. Bernie got me a fluoroscope with an image intensifier to do GI series, gallbladder series and barium enemas, in addition to using a Hirschowitz gastroscope.

Cotton: You joined him in practice, I presume? After one year of GI training?

Siegel: Yes. That was it in ’65.

Cotton: Okay, well, you’re a smart guy. Fast forward to ERCP. When did you first come across that?

Siegel: I’ll tell you. After seven years in Atlanta, I was accepted to Sheila Sherlock’s program in London. I had spoken with her many times when we were in New York and then Atlanta and, of course, there was no money, so Beverly and I had to put things together, starting in 1973, to apply for the position, which I got, and we went to London in August or September of 1973. At the British Society of Gastroenterology, in November 1973, a chap named Peter Cotton showed some movies. Sheila had no endoscopy background, so we were supposed to work at ERCP with John Summerfield and Elwyn Elias. I assisted them every Tuesday and Thursday. That was for two years, from ’73-’75.

Sheila had a condo in Miami and she would go there frequently. She came back after the Christmas holiday in 1973 with a Chiba needle. She came into our radiology conference and said, “Boys [of course, there were half women], I have this skinny needle for percutaneous cholangiography and I want us to compare it to ERCP.” Nobody really had a big experience in ERCP, so the conclusion of that study (published in Gastroenterology) was that PTC is great for a dilated duct and an ERCP might be good for a non-dilated duct. Of course, that was until we learned later how to get into the bile duct whether it was dilated or it was not.

Cotton: The success rate for ERCP in that study was about 60 percent, if I remember.

Siegel: Yeah, they were not that good. Bill Rosenthal had trained with Sheila Sherlock in 1955 and he would come to England every July at that time when she had an annual course. I had no job in ’74, had continued working on bile acids with her and I told Sheila that I needed a job. She had me interview with Bill, who was the director at the New York Medical College, which at that time was just a few blocks north of Mount Sinai. Bill gave me a job, and, in the fall of 1975, I started performing ERCPs as a training director.

Cotton: Had you done some in London or just helped?

Siegel: Not independently. In ’75, I started independent ERCP. The first case we were successful and showed some ductal stones. What do you do with stones? We didn’t know about sphincterotomies then. Of course the first duodenoscopes had a metal tip and when we first started doing sphincterotomies, we shorted out with the wire.

Cotton: When did you first hear of sphincterotomy? Did you see some done before you did it?

Siegel: What happened was that Safrany published a paper in Gastroenterology, I guess it was 1977. So, I saw the paper and I talked to Bill Rosenthal. He said you can’t do these on your own; you really have to go work with him. I went to Germany and he made me part of the team. I would rotate through and do ERCPs and sphincterotomies with the team.
Then I came back to New York and began doing sphincterotomies and, as a result of that and some publications, I ended up going to maybe 40 hospitals in the metropolitan area because no one could do it. In those days there were no DRGs, so patients could stay in the hospital until I could arrange my schedule to come to their hospital.

Cotton: You were the only guy in New York at the time?

Siegel: Big challenge because the surgeons really didn’t want us to intervene. They became our partners after laparoscopic cholecystectomy but they were not our friends in the early days. I had a couple of complications and was faced with losing my privileges, being suspended from Beth Israel. The chief of surgery and the chief of medicine and the chief of GI all colluded and said you’re having complications, that procedure should be surgical.

We did have a surgical endoscopist and if he had a complication, he could take the patient to the OR. We had to call a surgeon. Anyway, I was suspended for a short period of time and had to appeal to the medical board, as well as to the board of trustees to get my privileges back. I had to present data on my cases that I was bringing and the surgical team would have to approve that. That went on for about six months. I had a terrible time.

I went to many other hospitals. I would always carry a teaching scope and work with the other gastroenterologists, teaching them. If they could not accomplish the procedure, then I finished it and then they would follow the patient. That was part of the agreement. If any complication occurred, I would go back and help to supervise the treatment or follow-up.

Cotton: Some of the very early people into sphincterotomy were making their own sphincterotomes. Did you have to do that or were you able to purchase them from somewhere?

Siegel: When I was with Laszlo Safrany, the guy from MTW used to come and bring sphincterotomes and baskets. I ordered those from Germany and I had an Austrian technician who was very compulsive and he could re-do, he could fix the sphincterotomes. We used them over and over and over again.

Cotton: It used to be said that they needed to be blackened, like red fish, to work properly, right?

Siegel: Absolutely. When they did break this guy would repair it or make me a new sphincterotome or I bought a new one from MTW, until Wilson-Cook and some of the others started making sphincterotomes.

Cotton: That’s a good segue because we want to reflect on your relationships with Cook and with Don Wilson in particular. Can you tell us how you got started with Don?

Siegel: First of all, Shinya at Beth Israel started making his own snares because there were no commercial snares. They would order catheter material and wire and fix their own little snare, which was just a double loop, and attach an alligator clip to the ends as you tightened it and pulled on the polyp. I knew that Cook made catheters and I saw van Andel catheters in their radiology catalogue. I called up Cook and I said can you make these 180 cm long with a taper tip and 7, 8, 9, 10, 11, 12 French gauge?

Cotton: You were making your own stents. This would be in the late ’70s, early ’80s?

Siegel: Yes. Before they were commercially available. Then I started studying straight versus pigtail stents and realized that the straight stents that you and the Amsterdam group were making had better flow characteristics.

About that time, Don Wilson, who had his company in Canada, began to come to us and talk about equipment. This was before they moved to North Carolina. Then his son John was with him at the time.

I had an idea about a double-lumen sphincterotome. I sent the patent application in, and I had a double-lumen stent, into which I could put iridium seeds so that we could do brachytherapy. I had patent applications for those and I did another double-lumen, 11 French nasal biliary catheter that we could use with high-voltage radiation just to leave the nasal biliary catheter in place and have a wire inserted that the radiologist could attach and use high voltage for brachytherapy.

Cook was very nice. I showed them the drawings of our double-lumen sphincterotome and the double-lumen stent and within a few weeks, I had the prototypes.

In those days we only had the steel core, Teflon-coated guide wires, so I didn’t know if the insulation was that good, so I would pull back a bit before I would do a sphincterotomy. That was before there was a needle knife. We improvised.
Cotton: You mentioned the needle knife. I think one of your earliest publications was about the precut, which has been a slightly controversial subject as far as I’m concerned. Tell us about how you got into that.

Siegel: When I tried all the devices and couldn’t get in, I would take my 7 French dilating catheter with the guide wire, which at that time was a steel core, and attach the end to an alligator clip. I would use that as a needle knife. Of course, it was blunter. The diameter was wider than a needle knife. I was successful in getting in and we published that. When I submitted the article for GI Endoscopy, the editor said this is too far out. I submitted it to Endoscopy and it was accepted right away.

Cotton: You were using the guide wire as the knife, right? I didn’t know that.

Siegel: There was a paper just before that when a fellow took the end of a snare and used that to try to cut into the bile duct. People were improvising before we had the thin-diameter needle knife. Many people would start with a sphincterotome but I wanted the fellows to learn how to use a catheter because why waste a sphincterotome? We used catheters and guide wires and then the dilating catheter with guide wire. We were successful.

Cotton: You were using the guide wire as the knife, right? I didn’t know that.

Siegel: Absolutely. Twice a year we would have a live course on ERCP at Beth Israel. We had favorable financial support from Wilson-Cook, from Don Wilson.

Cotton: He had a tremendous influence worldwide in this field. We miss him dearly.

Siegel: Yeah, throughout the world. He was innovative and very cooperative and whatever I needed, man, he’d get it. He’d send you a prototype.

Cotton: Bring us right up to date. Are you still doing ERCPs?

Siegel: Yes. I’m still the co-director of our therapeutic endoscopy program, which I started in 1989. I had recently read some of your materials and I saw where you were talking about ERCP and low-volume providers, etc. I remember my wife, Beverly, said, “You know, there should be some certification.”

One of my fellows in 1989 came to me and said could you start a year of advanced program, so I went with him to a chief of endoscopy and he approved that. We started our program in 1989. In those days, it was two years for GI and we made it three, and now it’s four. We’ve continued with our therapeutic endoscopy. I agree with you.
I think someone should do 800, 1,000, 1,200 with supervision in that year of advanced endoscopy before they get credentials. Steve Silvis and Jack Vennes were very honest when they were running their program in Minneapolis. They would bring in the fellows and say you could do uppers, you could do lowers, you could do snares and polypectomies, but I don’t think you’re ready for ERCP. Many other program directors either would just sign off and let these guys go out.

Cotton: That’s a big problem as far as I’m concerned, obviously.

Siegel: We still don’t have certification but at least we have programs where people can gather experience over the course of a year, working with experts.

Cotton: What a lot of people don’t realize is that ERCP has become a much more complex business. It’s purely therapeutic now, and there are all these people who have had bariatric surgery and crazy bypasses like that. I’m personally glad to leave those to the younger people.

Siegel: I agree. I stand there with the scope and feed them the accessories, but I said my back is terrible. You guys can break your back, you’re young.

Cotton: Are there things that looking back you regret that you didn’t do or did that you’re prepared to share with us?

Siegel: You know, I really don’t have regrets. I think we were all glad to be at the right place at the right time, where we could improvise and didn’t have to worry about the hospital communities reviewing this stuff. I guess it could be considered reckless, but I think the only regret I have is that my team is so busy with working and trying to blend in with the health care changes that they’re not publishing as much. We’ve got a lot of material and we can’t even get some of our fellows to devote some time to work with the data that we already have. We’re not publishing as much as we did in the past, and I hope that I can motivate and stimulate some of these guys to do that.

Cotton: I think we all share that concern, that we’ve done a lot of stuff, but we’re sometimes not quite sure exactly what we’ve done.

It’s a different scientific world that we work in nowadays. You may be familiar with my recently published trial on sphincter of Oddi dysfunction. Those sorts of randomized sham-controlled trials are very tough and very expensive but necessary to figure out exactly what we’re doing in a changing world, where surgery is improving every minute and radiology is changing. It’s very difficult to keep a balance in what we do.

Siegel: Absolutely. I admire you and I admire the others who have been able to run some of these randomized trials because we get patients that come in referred from elsewhere and they say, “I’m supposed to get a sphincterotomy.”

Cotton: We had that problem, too. Patients come and see the expert and the expert says, “Well, actually, I really don’t know what I’m doing, so let’s toss a coin, shall we?” That doesn’t always go down well. Surprisingly, 80 percent of the people who were eligible for our study agreed to be randomized, which amazed me.
**Cotton:** Any other last thoughts for us?

**Siegel:** There was another turf conflict when we did skinny-needle PTC. A radiologist says, “Wait a minute, wait a minute. You’re doing skinny needles, then we should be able to do ERCP.”

**Cotton:** It’s interesting that right at the very beginning, the radiologists were actually interested in ERCP because they had nothing else apart from barium, as you know. More recently, they’re not because they have so many exciting toys. I actually trained some radiologists in Britain to do ERCP and they’re still doing it.

**Siegel:** That’s great. I don’t have any regrets. I was just fortunate to be around in the early days when we could accomplish things and now hopefully, are able to teach our fellows the proper way to do this, and to respect the patient’s anatomy.

**Cotton:** I know that you got the ASGE’s highest award last year, named for Rudolph Schindler, congratulations.

Thanks for your time. This has been a very nice discussion, Jerry.

**Siegel:** Terrific, it’s been great talking to you.

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**References:**


Stephen Silvis and Jack Vennes

We lost Steve Silvis and Jack Vennes some years ago but are fortunate to have received nice appreciations by early collaborators Michael Shaw and Chuck Rohrmann, and a prominent Minneapolis successor, Marty Freeman. Jack and Steve, or Steve and Jack, are aptly described as the Minnesota Twins since they worked so closely together in practice and teaching at the VA. Very few ERCPists from the USA—and overseas—have not benefited from their influence and advice.

Endoscopy’s Minnesota Twins

By Michael J. Shaw, MD and Martin L. Freeman, MD
University of Minnesota Medical Center
Minneapolis, MN

The name of the Minnesota Twins baseball team refers to the Twin Cities of Minneapolis and St. Paul, Minnesota, signifying two distinct cities that work together for the greater good. About the time the baseball team was formed, Jack Vennes and Stephen Silvis began working together at the Minneapolis VA Medical Center (VAMC)—a relationship that lasted for years, benefiting patients, gastroenterology trainees, their institution and the specialty of gastroenterology.

Both Jack and Steve grew up during the Depression—Jack on a farm in Wisconsin and Steve on a farm in South Dakota. World War II interrupted Jack’s college education and he served with distinction as a Naval aviator in the Pacific—flying a Hellcat fighter from an aircraft carrier—before returning to Minnesota where he completed his medical training and worked for a short period in a multispecialty group. Jack then took a faculty position at the Minneapolis VAMC. Steve was a few years younger than Jack and his career path followed a similar arc, including a stint as a Naval officer and working at a large multispecialty group after completing his medical training before joining the faculty at the VAMC.

Jack and Steve worked together as colleagues and research collaborators for more than twenty years with initial research studies focused on mechanisms of gastric acid secretion and assessment of portal hypertension. Imaging of the gastrointestinal mucosa increasingly occupied their interest in midcareer and very early on they became intrigued about the potential to image the pancreaticobiliary tree for both diagnostic and therapeutic benefit.

This resulted in their first publication on the use of endoscopic retrograde cholangiography—“Endoscopic visualizations of the bile and pancreatic ducts” (Gastrointestinal Endoscopy 1972; 18:111, 1972). The ensuing ten years saw rapid development in the diagnostic and therapeutic uses of endoscopic approaches to the pancreaticobiliary tree in great measure supported by their contributions, including more than 30 publications, a textbook that served as the standard reference for ERCP interpretation for greater than fifteen years, organization of CME courses on this new technology and a very open policy to professional colleagues interested in learning from them in action in Minneapolis.

Their research program addressed a number of important issues, including: cholangiopancreatography diagnostic criteria; perfecting the techniques of endoscopic sphincterotomy; complications of ERCP; infectious risks and appropriate endoscopic scope cleansing steps; development of effective mechanical lithotriptors for bile duct stone removal; and safe and effective electrocautery for sphincterotomy.

Both had long careers of service to the American Society of Gastrointestinal Endoscopy (ASGE), serving on a broad array of committees, the editorial board of Gastrointestinal Endoscopy, Jack as an ASGE Councilor and on the Governing Board, and Steve as ASGE Councilor, Secretary and President. These contributions were honored by the ASGE with the awarding of the Rudolph Schindler Award to Jack in 1978, and to Steve in 1987.

The many fellows who were fortunate to have Jack and Steve as mentors saw much more than these important achievements. For them, training with Jack and Steve was a highlight of their career. Lasting memories include being exposed to physicians of impressive teaching, cognitive and endoscopic skills, imparted with patience and humor.

As time passes, the singular feature that all recall first about them, though, is a rare degree of kindness that they extended to everyone. All who had the opportunity to work with Jack and Steve feel the same—we were all greatly privileged to have been mentored and befriended by these two extraordinary human beings.
A Radiologist’s Salute to Drs. Vennes and Silvis

By Charles A. Rohrmann, MD
Professor of Radiology
University of Washington
Seattle, WA

I was a senior radiology resident at the Minneapolis Veterans Administration Hospital in the early 1970s when Dr. Jack Vennes and Dr. Steve Silvis invited me to participate in interpreting the images obtained during their early ERCPs. They were extremely generous to include me as a member of their team and very perceptive in realizing that for the technique to succeed as a diagnostic modality, accurate radiologic interpretations were essential.

The MVAH endoscopy section was separated from the radiology department by several buildings. A shortcut across the VA grounds was pleasant in the summer but quite a different story during the long Minnesota winters. When the radiologist was not with them during the procedure, they would have their assistant deliver the films to us, sometimes while the patient was still intubated. I soon was able to tell by the thickness of the stack of films when air had entered the bile ducts through the injection cannula, and they were attempting to differentiate air bubbles from bile duct stones with multiple films. One of our early challenges was to tell the difference.

Steve and Jack had the perspective and foresight to get the radiology of ERCP right. We developed our abilities at image interpretation together. Clinical, surgical and pathologic correlation was scrupulous. Retrospective review of the images with patient follow-up information led to large case series and publication of the radiologic findings.

It was their feeling that the radiologic literature was important to provide high quality ERCP images and analysis to radiologists who would be working with endoscopists in diagnostic interpretation. This was especially true in the pancreas, where radiologic experience with pancreatic pathology was much less than in the biliary system because of prior experience with percutaneous transhepatic, operative and postoperative cholangiography.

The Minneapolis ERCP team was committed to sharing their experience as rapidly as possible by welcoming interested gastroenterologists and radiologists to observe the procedures and review the rapidly evolving radiologic image file.

Jack and Steve required that the gastroenterologists have a certain level of upper endoscopy experience and that a radiologist accompany them during their visit to Minneapolis. While the endoscopists studied the technique, we worked with the radiologists to enhance their image interpretation.

Very soon the interest in visits to Minneapolis for ERCP training exceeded our ability to accommodate the requests and the “ASGE Minneapolis ERCP Course” for gastroenterologists and radiologists was created. In addition to lectures and demonstrations of ERCP technique, there were a large number of ERCP interpretation sessions run by radiologists. These courses continued into the mid-1980s and were a continuing testament to the educational fervor and generosity of Jack Vennes and Steve Silvis in sharing their experience as pioneers of ERCP.

References:


Nib Soehendra

**Nib Soehendra** is close to, or at the top of, everybody’s list of the most innovative and influential endoscopists in ERCP, and indeed other procedures. Working particularly closely with Don Wilson over the years, his inventions fill the catalogues and the closets of our endoscopy rooms. Nib has been generous with his knowledge, hosting thousands of eager post-graduates at his center in Hamburg.

**Peter Cotton:** It’s really a great privilege for me to be having this conversation with Nib Soehendra, one of the giants of gastrointestinal endoscopy and certainly one of the foremost pioneers in our field. Perhaps you could just tell me a little bit about your upbringing. Where did you grow up and where did you become a doctor?

**Nib Soehendra:** I grew up in Jakarta, the capital of Indonesia. I became a doctor in 1968 at the University Medical Hospital of Hamburg.

**Cotton:** When did you move to Germany?

**Soehendra:** I moved to Germany in 1961 for medical school.

**Cotton:** You trained as a surgeon, right?

**Soehendra:** I am a surgeon, yes.

**Cotton:** When did you finish your surgical training?

**Soehendra:** 1974, first at the Catholic Hospital and the University Hospital in Hamburg.

**Cotton:** You had to learn German pretty quickly then?

**Soehendra:** Oh, yes. I came there at the end of October 1961 but, at that time, the medical school was full, so I had to go to the dental school for six months. During this short period, I learned German in the evening at the university.

**Cotton:** Can I just ask you about your name, Nib? Is that an abbreviation of another name?

**Soehendra:** I have Chinese names. One of the first names was Bin, B-I-N, so when I have to change my first name to an Indonesian name, I just took this Chinese first name and instead of Bin, N-I-B, Nib.

**Cotton:** When did you first get involved with endoscopy and who with?

**Soehendra:** In 1969, when I was starting my specialist training, I did my first endoscopies with my best friend, a medical professor named Manfred Rehner, just ourselves without any teacher.

**Cotton:** You didn’t really have a teacher? Like me, you learned it yourself?

**Soehendra:** Yes.

**Cotton:** What drove you to do endoscopy when you had all that surgical training?

**Soehendra:** The idea was from my surgical mentor, whose name is Hans William Schreiber. He was thinking that a surgeon needs endoscopy at that time because he realized that x-ray was not so precise. That was a good fortune for me because his medical partner refused to do endoscopy. He said that gastroscopy is dangerous and x-ray is enough.

**Cotton:** Which were the first instruments that you were working with?

**Soehendra:** That was an esophagoscope from Olympus.

**Cotton:** EFL, probably.

**Soehendra:** Then second, the side-viewing gastroscope, the GFB.

**Cotton:** GFB, yes. You didn’t have any work with the old semi-flexible instruments?

**Soehendra:** No. I didn’t, but I knew about it because the supervisor of my doctoral dissertation was Professor Klaus Krentz. He was one of the real pioneers of gastroscopy in Germany and he wrote a book named *Gastroscopy*. As a student, I was allowed to assist him, but no chance to have the scope in my hand.

**Cotton:** When was your first contact or knowledge of ERCP?

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**Cotton:** When was your first contact or knowledge of ERCP?
Soehendra: That was about 1969, when the first paper came out. I did my first ERCP in 1970, in Hamburg at the Catholic Hospital. I must add that I was alone. Nobody assisted me. I did my first ERCP in the x-ray room I got from the radiologist when they finished their work and they gave me the key to the room. No nurse, because this is almost in the early evening after my surgical work.

Cotton: It was just you and the patient?

Soehendra: Yes, just me and the patient. I had to insert the scope and then, to make the first fluoroscopy and picture, I had to run to the other side. The room was very small. I left the catheter inserted in the papilla and the scope on the side of the patient and I run to the other side to make the x-ray picture.

Cotton: When did you first hear about sphincterotomy?

Soehendra: My first sphincterotomy was in 1975, after reading the first article from Erlangen that was published, I guess in 1974. I asked the people in Erlangen where I could purchase this sphincterotome. They said, no, this is still a clinical experiment and you have to wait. I couldn’t wait. I made my first sphincterotome by myself.

Cotton: Let’s get on to stenting because the whole world is grateful to you for inventing biliary stenting. What gave you the idea?

Soehendra: Many of us among the pioneers had already inserted nasobiliary catheters. At that time, you remember, the first duodenoscope allowed only for the 5 French catheter because of the small channel. We wished, because of the discomfort of the patient, that we could cut the nasobiliary catheter in the duodenum to make it into an endoprosthesis. Finally, I came to the simple idea of why don’t you cut the catheter before you insert it into the scope? I used a transfemoral angiographic catheter from Radiology, which was a 7 French catheter, so I had to use the GFB-2 gastroscope, which was really short, I guess about 80 cm. That was the beginning of stenting.

Cotton: Yes, I remember using the GFB-2 for ERCP. Stenting was the beginning of something very special and took off very rapidly around the world. You were making your own stents early on, before any of the accessory companies got started. What was your first contact with Don Wilson and Wilson-Cook Medical?

Soehendra: Yes, it worked well. This is my great fortune. The first sphincterotomy was successful.

Cotton: Was there some resistance or were people happy that you were a surgeon doing something in a very less-invasive way?

Soehendra: Yes, they were happy because my surgical mentor, the man who had the most power in the hospital, was always behind me. When I succeeded at my first ERCP, my first sphincterotomy, I immediately went to his office and he said, “Bravo, bravo. Continue.”

Cotton: That was in 1975. Were there a number of active centers in Germany by that time?

Soehendra: Only Erlangen, Bonn, Hannover and Munich.
Soehendra: I guess in the early 1980s, Don called me from the US. He said, “I got your name from Norman Marcon. You have many ideas for making accessories.” He came then to Hamburg to visit me. I was invited to North Carolina and I met Don, and later I met Minda.

Cotton: Sadly, we lost Don in 1999, but I know that Minda has continued to visit you.

Soehendra: We are very pleased that she still continues to visit us at least twice a year.

Cotton: Don was not just a manufacturer. He supported your work in various ways?

Soehendra: He was really a very generous man and we became good friends. I got many ideas, for example the Tannenbaum stent, the mechanical lithotriptor or the stent retriever or even the dilator, or the so-called Soehendra Universal Catheter. I just called him and he came to Hamburg in a few days with the prototype product.

Soehendra: The latest one was the Duette, the use of the multi-band ligator for EMR. I give the idea to Barry Slowey and, later, I published it in 2006 in *Gastrointestinal Endoscopy*.

Cotton: I remember that 2006 was an important year, because you were given the President’s Award of the ASGE, with good friend Rob Hawes.

Soehendra: Yes. I was so thankful for that.

Cotton: I remember being at that meeting and we were all thrilled at the recognition. Rob Hawes kindly explained why he chose you.

Let’s just talk briefly on other aspects. Do you have any big regrets in the endoscopy world, in your career looking back?

Soehendra: Oh, yes. The biggest regret, I think, was the uncontrollable variceal bleeds. That motivated me to use the glue to control the variceal bleeding.

I have to tell you a secret. My surgical mentor, Professor Schreiber, was the pioneer and the biggest portacaval shunt surgeon in Germany. He supported me to find endoscopic alternative to replace shunt surgery. When I was successful, he was very happy and stopped all the shunt surgery in his department.

Cotton: I asked you, Nib, about your biggest regrets. That’s not a regret. That’s another triumph. Do you think the fact that you trained initially as a surgeon helped you to be slightly more aggressive than some other gastroenterologists?

Soehendra: For sure. But probably the most important thing was the support of my surgical mentor, Professor Schreiber.

Cotton: Can I ask you, Nib, are you still doing procedures?
Soehendra: Yes. I am still working in the private practice in Hamburg, just doing gastroscopy and colonoscopy. The most frequent therapeutic procedure is polypectomy. Sometimes, I also perform EMR using the Duette system in the esophagus; septectomy in Zenker’s; and sclerotherapy or banding of esophageal varices.

Cotton: You’re not doing ERCP anymore?

Soehendra: No. No ERCP.

Cotton: All right, Nib. I’m really thrilled that we could have this conversation. I thank you very warmly.

Soehendra: Thank you very much, and best regards to Marion.

References:


“It was a great pleasure for me to present Nib Soehendra with the President’s Award at the Crystal Awards Ceremony in 2006 at the conclusion of my ASGE presidential year. In part, I chose Nib because of his legacy of innovation, his superb endoscopic skills, the breadth of his clinical research and his ability to teach endoscopy.

However, the most important reason for choosing Nib is because of the magnitude of his impact on so many endoscopists around the world. As I traveled, virtually everywhere I went, I ran into individuals whose life and career had been nurtured and shaped by Nib.

His quick wit, humor and kind smile lives in the hearts of endoscopists from China to Chile to Charleston to Copenhagen. Nib is truly an amazing individual and that is why I gave him the President’s Award—it is well deserved.

We love you Nib.”

– Rob Hawes
David Zimmon

David Zimmon has been a major influence in ERCP in New York and the USA for many years. His confidence and competitive nature enabled him to overcome many obstacles, especially in the early days, when many surgeons, as well as prominent gastroenterologists, were dismissive of the disruptive ERCP techniques, many of which he pioneered.

Peter Cotton: Can you start me off by telling me where you grew up and about your medical school training?

David Zimmon: I grew up in South Miami in the old days. I went far north to Emory University as a humanities major. I was in the ROTC and if I graduated, it was off to Korea in the Army. I had the opportunity to apply to medical school at the end of my second year in college and was admitted to Emory after only three years of college, so I have no college degree, but I didn’t go to the Army.

Cotton: That’s clever.

Zimmon: I didn’t realize how important it was until many years later.

My interest was science and research that I did as a student. A pathologist, Walter Sheldon, who just had come to Emory from Harvard, asked if I’d like to go to Harvard. I said yes. Emory at that time had limited research. It was mostly clinical but they were trying hard to become what they are today. They accepted me to Harvard.

So, my medical school training was split between Emory for the first two years and Harvard for the second two years. There I did research in neonatology, cardiac surgery and clinical medicine, as well. I wasn’t smart enough to get into Mass General or Brigham. I wasn’t the top of my class. Interns were being recruited from Harvard for a combined program at the Cornell Medical Division of Bellevue and Memorial. They accepted me and so I went to New York. We spent one third of our time at Memorial, which was absolutely fascinating. It was the beginning of chemotherapy for cancer. There were wonderful clinicians. I spent the rest of the time at Bellevue, which was the slam-bang city hospital in New York. I did an internship and then two years of medical residency. My boss there was a distinguished gastroenterologist, Tom Almy. I entered his program for two years of gastroenterology training, where I was introduced to endoscopy.

Cotton: What year was that?


Cotton: Okay, so that was when you first came across endoscopy. That must have been semi-flexible, right?

Zimmon: Not even semi, it was rigid. A Jackson esophagoscope. It’s a steel tube with a light at the tip and a telescope to see through the tube. Do you remember the name Rudolph Schindler? I got his book and someday will donate it to the NYU library. The argument with Schindler was that his wife held the head of the patient during those early endoscopies. If you remember the question, was who was more important, the wife or the endoscopist?

Cotton: That’s always a good question. Right, so when did you come across something more flexible?

Zimmon: While at Bellevue in GI training, Phil LoPresti had what I would call a semi-flexible esophagoscope, a short instrument. I don’t quite know how Basil Hirschowitz fits into this, but obviously the guy who did the fiber optics, Larry Curtis, was important. We observed that and I published a paper in Gastrointestinal Endoscopy in 1968 comparing rigid and flexible esophagoscopy.

Cotton: Curtis came to speak at the first endoscopy meeting I held in London in 1970. His pre-dinner talk went on so long that the poorly behaved and hungry young British doctors forced him to stop by throwing bread rolls (honest).

Zimmon: Rigid scopes had some advantages because we could use biopsy devices through them and do all sorts of interesting things like removing foreign bodies. It was difficult, but we could do it. The esophagoscope wasn’t very flexible, and then we went through the whole sequence: the gastro camera, and then flash photography, and then the fully flexible scopes with instrument channels and even with an elevator.

Cotton: Just before we get to the elevator, the first fiberscope that most people used was an Olympus gastroscope. Was the GFB part of your initial experience?
Zimmon: Yes, the GFB.

Cotton: Right, so that would have been in the late '60s?

Zimmon: I’m not sure of the date, but probably.

Cotton: Where are you at that stage? You had finished your fellowship, obviously. What were you doing?

Zimmon: I went to London after my GI fellowship and spent two years with Sheila Sherlock in liver disease. I can’t describe her. One of the most distinguished clinicians and researchers on liver disease in the world. I learned a lot from her.

I was also on the procedure team. They knew I did endoscopy, so I did endoscopy there. The important thing for today is that we were just beginning to work on percutaneous cholangiography. It had been done in Sweden and Sheila was picking it up. Unfortunately, the image intensifier that they had in the basement of the Royal Free was not unpacked. We did splenoportography, which I had done as a Bellevue GI fellow, arteriography and hepatic vein catheterization. When we did a percutaneous cholangiogram, we tried to drain bile by sliding a little catheter over the needle. When I came back to New York, I was pretty good at all of that and started to do all those procedures.

Cotton: Where were you working then?

Zimmon: I was the chief of GI at the Manhattan VA in 1965. It’s a huge 1,000-bed VA with very few women, no obstetrics and no pediatrics. Just a large collection of people with liver disease, GI diseases and everything else. It was a wonderful place for a young investigator and teacher to work. I was doing all these procedures to the distress of the NYU people. What happened in the interim was Cornell and Columbia had been dismissed from Bellevue by the City of New York, and NYU took it over. I had to change my stripes to NYU. I guess by that time I was an assistant professor. I was doing all these “crazy” things at the VA, at least they thought they were crazy. My boss who supervised me liked what I did.

Cotton: Who was that?

Zimmon: Norton Spritz. He had been a junior attending when I was at Bellevue, so he knew me from my internship, residency and fellowship. He became the chief of medicine at the VA and so off I went. Of course, the rest of the medical school didn’t like that very much since it was before radiology did special procedures.

Cotton: Let’s move forward now because the main focus of these discussions is ERCP. When did you first hear about that?

Zimmon: I was an angiographer at the Royal Free in London because we did research on hepatic blood flow that required arterial catheterization. I was doing percutaneous cholangiography and percutaneous stents. Then I saw a film about ERCP by Oi, who was a bright young Japanese physician. The instrument was made by Machida. Do you remember that?

Cotton: Yes.

Zimmon: I flipped because we had many jaundiced people that we knew had liver disease but we didn’t know if they had anything else. The last thing you want to do is a percutaneous cholangiogram on somebody with a rock hard cirrhotic liver, portal hypertension and bleeding risk. I thought ERCP is just perfect. At the VA, I needed to attract fellows to staff the hospital and take care of the GI patients. The way I did that was promote endoscopy, which I did vigorously. We got a lot of people who wanted to learn this new technique, all young guys and most of them very nice and bright.

Cotton: Right. So how did you actually get into ERCP?

Zimmon: Well, I went to the VA research committee and said, “Can we get one of these instruments to cannulate the bile duct?” We didn’t even talk about the pancreas in those days. The surgeon on the committee said, “Are you crazy?” They wouldn’t buy it, so I had to do a drug study and raise the money myself. I bought the Olympus duodenoscope. Machida had gotten out of it and Olympus made the instruments. I have the ninth ERCP scope from Olympus.

Cotton: What year would have that been? 1970?

Zimmon: Late 1970, because we did our first ERCP in 1971.

Cotton: Me, too. Did you watch anybody do it or did you just get up and do it yourself?

Zimmon: There was no one to watch.

Cotton: Where were you working then?

Zimmon: I went to Japan briefly but you obviously didn’t.

Cotton: I went to Japan briefly but you obviously didn’t.
vein catheterization and percutaneous cholangiography with percutaneous stents, it was immediately obvious that, if I’m looking at the bottom of this duct, I can do the same thing I did through the liver, insert a tube very safely. I started to do it but I did it in a very careful way. This was New York and the knives were out.

Then we started out and published a paper in a Canadian journal on the cut, the flush and the drain. We found that if you just flushed and irrigated the bile duct in a patient with stones and cholangitis, the bile started to flow and the fever went away. You could do elective surgery instead of emergency surgery, so we did that. Then I went with some trepidation to my boss and said, “I can put a little tube in there and bring it out the patient’s nose.” First, we bring it out the mouth and then we bring it up the nose and take an x-ray. You can drain the bile, keep that patient comfortable and be sure they’re not going to get sick until the surgery. He said, “It’s a great idea.” So, off we went and we started to do nasobiliary drainage.

Cotton: You must have been one of the first if not the first to do nasobiliary drainage. Were you?

Zimmon: I was the first. I made the drain myself in my basement because, if you remember in the early days of angiography, you started with a coil of tubing and shaped the catheter yourself.

Cotton: That sounds like a great step forward. So, then when did you hear about sphincterotomy?

Zimmon: For many years, a very distinguished surgeon at NYU named Henry Dubouillet had done transduodenal sphincterotomies. He and Ken Warren at the Lahey Clinic, and maybe some others. But it was considered an anathema to other surgeons, who always did the exploration through the cystic duct or the bile duct. He used to give a lecture every few years and surgeons would come to watch. I did, too. I had a good feeling for it but when I went to the research committee, the research committee went bananas. They absolutely refused to consider it. Then Kawai and Classen succeeded. Classen was under the tutelage of Ludwig Demling, who organized all the surgeons in Germany. If you remember, they had a meeting in Frankfurt.

Cotton: Actually, I was just talking to Classen this morning about exactly that. That was a very clever thing to do.

Zimmon: Demling was powerful and very smart, and he opened up the pathway. Kawai and Classen were two very brilliant people and they did the first sphincterotomies. As soon as it got published, I went to the research committee and said, “Come on, we can do the same thing,” and so they said, “All right, but it’s got to be a very strict protocol.” We always did these procedures under a strict protocol and published. For instance, one of the things I’m proud of is that we published our first 300 ERCPs without major complications and that opened the field because everyone was very concerned about the dangers of ERCP.

Unfortunately, you couldn’t describe all the safety and technical issues; you could say we did it. Anyway, so we started with diagnostic ERCP before ultrasound, CT or MRI, and soon followed with nasobiliary drainage. Stents in the bile duct were the same argument. We can just put a little tube up there and leave it. I think it will keep on draining as with percutaneous stents. I cut the terminal pigtail off the 5 French nasal biliary drain and put it up the bile duct with the straight end in the duodenum. It worked well most of the time. As it only had a one-millimeter lumen, we used two and then three stents, side by side. In patients with bile duct cancer, four or five 5 French stents were needed. In a dilated bile duct, the single proximal pigtail occasionally moved into the hepatic duct, making it difficult to remove and exchange stents. To prevent this, we added a pigtail to the duodenal end—the double pigtail stent.

Pancreatic stents followed the same path. First, we placed easily removed naso-pancreatic drains. When that went well, we inserted pancreatic stents. Stone removal and the other techniques followed.

Cotton: Most people say that Nib Soehendra was the first person to describe stenting, in 1978.

Zimmon: No, he didn’t. I went to a Demling conference in Erlangen, Germany, and showed the double pigtail stent. Nib picked up on it. No lack of credit to him. It was a very delicate issue in the United States to have something like that even with research approval in the VA because the surgeons were very upset that I could put my hand through someone’s mouth into their bile duct.

Cotton: I know about that. Okay, just give me the broader picture in the United States at that time, when you were doing these early sphincterotomies. Were you the first? Were there other people doing sphincterotomy?

Zimmon: I think I was the first to do a sphincterotomy in the United States. I don’t know when Jack Vennes and Steve Silvis did theirs, but my first publication was 1975 in The New England Journal of Medicine.

Cotton: Right. Mine was in ’75, too. Actually, it’s interesting. I was just talking to Laszlo Safrany. You remember him?

Zimmon: Very well.

Cotton: He said he was called to New Orleans in December 1974 to do a sphincterotomy on somebody with cholangitis. He might have beaten you by a few months.

Zimmon: Laszlo wasn’t going to publish. He’s busy. Well, you have to give all of them all my regards because I know Laszlo, Meinhard, all the people who have worked for years to develop these techniques. We worked together showing each other interesting cases, devices and techniques.

Cotton: I know you were very early on with Don Wilson. How did you meet him and where and how did that go?
Zimmon: Sometime in 1979 or 1980. He was the president of Cook Canada. He called me and said would you come to Toronto, I’d like to take you to dinner and I want you to meet Norman Marcon, who I didn’t know. I went and spent a lot of time talking about techniques and devices.

I should say one more thing. In those days, Cook was one of the primary movers of angiography. They made the guide wires and catheters. Don was a dynamo with great technical understanding and skills. He would get a call from Toronto General Hospital. “We’re going to do a renal angiogram tomorrow, can you come by and help us?” Because he would have to set up the injector, tell them don’t do that, do this, and so on.

When Norman Marcon and I met him, he said, “I think gastroenterology is going to do exactly what angiography has done. Just take off and be a wonderful business. I’d like to be on top of that. Would you help? You know how to make these devices.” Norman made the first variceal injector. In 1977 we published a letter in The New England Journal of Medicine that said thank you very much for publishing our paper on endoscopic sphincterotomy, but we want to bring to your attention the fact that there are no instruments available to do this. You have to make them yourself. The title of the letter was “Homemade Medical Devices.”

It was long before the FDA, and all you have to go through today with anything new or even to change something that’s old. I said it would be a pleasure to have Cook make our devices. I paid my children a nickel for making a double pigtail stent. Then it got to be a quarter. It was getting to be expensive.

Cotton: You made your first sphincterotomes?

Zimmon: Absolutely. We used a very different technique than Classen and Kawai. You remember this. They would put the sphincterotome in the bile duct, bow it and then cut. If there was bleeding, the surgeon would handle it. Well, if you did that in New York, you would be out of business. You’d be in court. What we did was a papillotomy. It’s a very small incision, well controlled to prevent perforation or bleeding. Even then we had a couple of episodes of bleeding in the first few hundred cases before we understood the anatomy. There were no tools for controlling bleeding in those days. The idea of injecting epinephrine was later. One woman was operated on as an emergency as she was bleeding rapidly. We used a lax braided wire, cut very slowly and used cauterity for bleeding.

Cotton: Like everybody does nowadays.

Zimmon: Like everybody should do now. I hope everyone does. That’s what we did and got away with a lot. Before sphincterotomy, we had been fiddling out little stones with urological baskets that I got from John Abele at Boston Scientific, and putting in drains and stents. So, if someone was really sick, you could flush, put a double pigtail stent in and wait a few days until everything quieted down, and then go back. Then it was easy to cannulate and get your sphincterotome in. So you could do this in stages, which may have been forgotten.

Cotton: Back to Don and the collaboration with him. You designed some of the earlier devices, right?

Zimmon: Many of them. Swenson had one with the long nose, and I don’t know what role Nib played, but a group of people were working together. I remember visiting you in London with Don, and visiting Nib and Meinhard in Erlangen, and Helmut Koch. Don brought us all together many times in Europe and other places to talk about what should be next. In those days, if you gave Don a call and said I need this thing, you sent him a drawing, you got it a few days later. You could try it out and say, no, I think it should be turned this way or that way.

Cotton: Right.
Zimmon: I once went to visit Steve Silvis and Jack Vennes at the Minneapolis VA. It was a huge VA and they had a wall with sphincterotomes on it. They were all homemade and some turned left, some turned right. I don't think they took it well when I said, you don't want them to turn.

Cotton: One of the earlier sphincterotomes I got came out backwards so I gave it to one of my competitors to get him started.

Zimmon: One of our problems was, in the old days, everyone used to try to change the invention a little bit. What Don did was bring this group of people together, sometimes by phone and by mail, and then take the best of it and develop a device that we could all use, like Nibs' stent retriever. I said to Don, that's crazy; we just take the stent out with the balloon. He said, but that's expensive. Nib's lithotripsy method was brilliant.

We traveled around the world teaching. I remember you and I sitting in Brussels, watching Claude Liguory working to take out a large stone. Michel Cremer asked, what should we do now? You and I agreed, put in a double pigtail stent and go to lunch. We said, Claude stop, we're going to lunch. We came back from lunch and Claude was still poking around. We went to Mexico with Claude and Norman and Nib and maybe somebody else, to do a live video. It was two days, just like Norman Marcon's meeting in Toronto. It was full of young doctors just dying to do this for their patients.

Cotton: Don supported many different training meetings. It was amazing. He certainly helped me a great deal.

Zimmon: Yes, and he had an apartment in Hamburg, where people from all over the world could come and stay for three months to watch Nib. Of course, in three months with Nib, you'd see a lifetime of work. Don made an enormous contribution. Not only did he build the devices, support the people that were moving the field forward, but he trained doctors all over the world. Then they trained the later doctors. Don actually developed the whole field. Most don't understand that.

Cotton: Are you still doing the procedure? Are you still doing ERCP?

Zimmon: I stopped about 18 months ago.

Cotton: Right. I stopped about three years ago and I haven't missed it for one minute. Do you miss it?

Zimmon: No, that x-ray apron was really too heavy.

Cotton: But you're still practicing?

Zimmon: Yes, I'm still practicing and I have a great partner who's been with me for 17 years. I can go in and sit in a chair and say, oh no, I don't think you ought to do that. Remember the last cut is the one that bleeds.

Cotton: I'm sure you're very popular doing so.

Zimmon: No, no. He puts up with me because he knows I just can't turn it off as much I would like to. Training physicians while a discipline is developing new risky devices and techniques is taxing. Supervision must be intense to avoid complications and protect the patient.

Cotton: Fair enough. One of the questions I've been asking the pioneers like yourself is if there some things you regret doing or not doing?

Zimmon: I can't think of anything I really regret not doing. What I regret is that some of the things that we did can't be done anymore. The New York Society arranged a one-week, round robin training program. You could spend a day with me at the VA, a day at Memorial with Lightdale and Winawer, a day at Saint Luke's with Dick McCray, time with Jerry Waye at Mt. Sinai and other places, and you could really learn. Physicians, GI assistants and radiologists could come and stand in my x-ray room. I had a large control booth where you could stand and look through the window. You didn't have to put on an x-ray gown. It was built for me. Some would stay for an hour and then say I got it, I'm going home.

Cotton: Things have changed a little bit since then.

Zimmon: There's no way to do that now. What we should have is a few centers of excellence where you can have temporary privileges and you could train hands-on with close supervision, but the malpractice situation and everything else makes it impossible.

Cotton: Right. I worry about the quality of a lot of the ERCP being done around the United States.

Zimmon: One advantage I had was experience with percutaneous and angiographic procedures. There was very little understanding of the pancreas when we started out. I went to St. Vincent's in 1984, primarily because Arthur Clement said, “Would you come to St. Vincent's and do some ERCPs?” He spent his life studying the biliary tree and pancreas. We produced x-rays that no one had ever seen before. I'm afraid I was very lazy and didn't do an atlas the way Jack Vennes and Steve Silvis did.
Cotton: It was interesting that in the early days of ERCP, some of the radiologists were very excited because they didn’t have anything else to do, apart from barium, but now that they’re all consumed with CT and MR and PET and stuff like that, so they’re not so interested anymore.

Zimmon: Well, exactly, and that’s a big problem in training. To do ERCP, you have to be a radiologist and a bit of a surgeon. I had a tremendous advantage because my best friend at the VA was the major abdominal surgeon, Dick Kessler. Sometimes he’d stand at the foot of the bed and I’d say, “Dick, you’d better operate on this guy,” and he’d say, “No, do an ERCP first.” These were Dick’s words: “We aren’t getting paid by the case, and we don’t want to have a death.”

Cotton: Are there things that you need to highlight that we haven’t touched on?

Zimmon: Yes, I think it’s very important to understand that when diagnostic ERCP started there was no ultrasound, there was no CT. There was no way to image the pancreas except by opening the duodenum surgically. In New York, I was the only person who did percutaneous cholangiography. A friend of mine in the radiology department, who taught me how to do barium enemas and then moved over from Bellevue to University Hospital, did a few and had one complication. The surgeons made him stop. It was done first in New York in 1955. The first report of percutaneous cholangiography was in the ’30s from Vietnam.

People have to understand where all this came from and how it evolved. Without Don Wilson, little of what we do today would have developed. Then the other big problem is that neither the administrative, the medical nor insurance people understand that you have to start somewhere to get the benefits of therapy. There was an editorial… I used to show this slide. Do you remember Ingelfinger?

Cotton: Yes, of course.

Zimmon: Ingelfinger was a GI guy, very distinguished and he edited The New England Journal of Medicine. He once wrote an editorial about ERCP before ultrasound, before CT, saying why do we need such a highly technical procedure that’s expensive. What’s this going to do for us? That’s what we were dealing with. There are curmudgeons everywhere saying don’t do the next thing, don’t have the next device. I’ve seen that in a lot of entrepreneurial meetings where administrators say no we’re not going to pay for that. They don’t understand that the next step becomes better and it becomes cheaper. All this emphasizes the remarkable insights and leadership of Don Wilson.

Cotton: Right. It is difficult for today’s gastroenterologists to imagine that world that we grew up in. Some of them get rather bored hearing me talk about those days.

Zimmon: Well, there were a lot of turf battles. I think that was the biggest challenge in getting this all going. First of all, the surgeons couldn’t believe it. For many years, when I was in private practice and I billed for the ERCP, I got the fee for an upper endoscopy. They said ERCP, that’s research.

Cotton: It sounds as if you had more difficulty in New York with your surgeons and colleagues than I did in England. At that time in England, we were not paid for procedures, so nobody cared really too much what you did.

Zimmon: Don’t say that too loud because then that will become standard.

Cotton: I’ll tell you one story. I gave a presentation early on about sphincterotomy to the Royal College of Surgeons in London. The president, Rodney Smith, was a wine connoisseur. He said, after the talk, that he thought that the College of Surgeons should license a few gastroenterologists to do this procedure to remove stones, but they should charge corkage on each stone. It was a very nice summary of the problem at the time.

Zimmon: The turf battle was enormous in New York.

Cotton: I was sparring with Les Blumgart a lot in London before he moved to the States.

Well, it’s been a lot of fun, David. Thanks very much, sir. Always a pleasure.

References


We hope that you enjoyed and were inspired by these amazing anecdotes of the early days of interventional ERCP. The innovative and collaborative success of these physicians serve as a unique example for all of us today still working to provide solutions and new technologies in GI endoscopy.

We are privileged to have had the participation of our physician pioneers in this effort as well as our guest contributors who generously provided reminiscences and tributes. Our sincere gratitude is extended to our guest editor for these two commemorative volumes, Dr. Peter Cotton, whose insight, good humor and expert guidance paved the way for these engaging conversations to be shared.

These two volumes capture the commitment and perseverance that made those early ERCPs possible and likewise will continue to define the future of endoscopy. We dedicate this project to endoscopists, past and present, whose work contributes to improving patient lives everywhere, and to the memory of Don Wilson, whose vision and resourcefulness motivate us each day.
What I learned from Laszlo Safrany is hard to sum up, but, if I had to put it into two words, that would be to “think fundamentally.” His focus was anatomy and pathophysiology. I learned to work safely, to be sure about every step during endoscopy and to do it exactly. Laszlo was very innovative, and had many new ideas about what is possible and how to make it happen. He suggested the basis for many new techniques and stressed the importance of publicizing every new achievement. I learned his priorities and have practiced them in my professional life. I would never have reached my status today without the Safrany kindergarten.”

— Eva Brownstone
Vienna, Austria

During my training with Joe Geenen, he got his sphincterotomes from Erlangen through his connection with Meinhard Classen. When I was ready to go back home to Israel, I was frustrated knowing that I would not be able to do any therapeutic procedures because I was lacking a sphincterotome. Joe kindly gave me one of the Erlangen sphincterotomes with his blessing to use it in Israel, but never in the USA. I performed 17 with this one sphincterotome before the wire broke. We were unable to fix it but commercial varieties soon became available.

— Simon Bar-Meir
Herzliya, Israel

“I arrived in Amsterdam from Australia in 1993 to work at AMC with Kees Huibregtse. We did ten or more ERCPs every day. Kees was a magician and catheters went places I never thought possible. His summary of his technique—‘just stick it in hole’—did little to illuminate me! His skill in precut sphincterotomy convinced me of its value when the prevailing opinion was to the contrary. Opinions change and now early precut for difficult cannulation is accepted. I did not understand the calluses on his thumb but now I have the same to remind me of the great master.”

— Mark Schoeman
Adelaide, Australia

It was quite an adventure bringing a wife and three small children to Paris in 1979. The first time I met Claude Liguory was in his office at Clinique de la Alma. After preliminaries, he announced he’d take me out to lunch. We proceeded through life-threatening traffic around the Arc de Triomphe to Chez Georges in Porte Malliot. My ‘Chez Berlitz’ French acquired in Cincinnati a month earlier did not extend to ‘Tete de Veau and Filet de Bar Roti avec sa Croute de Chorize,’ etc. Claude ordered for me and thus began an extraordinary, year-long experience, learning French cuisine and ERCP, and a wonderful friendship that has now lasted 35 years.”

— Gary C. Vitale
Louisville, KY, USA

“Being exposed to the magical skills of Nib Soehendra first in 1986, I went to the UKE (Universitätsklinikum Hamburg - Eppendorf) in Hamburg in 1987. The next four years were like a dream come true. What overwhelmed me most were Nib’s skill and innovative thinking, and his passion for teaching. Throughout, he maintained a human touch and, most importantly, humility. I was transformed from a baby into a fully trained adult interventional endoscopist, and thereby able to serve the Indian subcontinent.”

— Amit Maydeo
Mumbai, India