Challenges and Rewards of a Pioneer

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It has been my pleasure and honor to serve as President of the Society of Laparoendoscopic Surgeons (SLS) during the past year. Our society is being increasingly identified as a high-tech society. During my tenure, the board, working with Chairman Dr. Paul Wetter, accomplished a great deal in this regard. It was my distinct privilege to serve with such a dynamic, complementing board. I would now like to acknowledge the contributions of my fellow board members and pay tribute to them. Please stand up and be acknowledged.

A pioneer is one who is the first or earliest in any field of inquiry or enterprise. One who thinks out of the box and acts on those thoughts. An innovator, a ground breaker, a trend setter. One who initiates, instigates, sets in motion, takes the plunge. Being a pioneer can be exhilarating, but it requires considerable dedication, a great deal of work and the ability to confront adversity and accept rejection. I have been blessed—or cursed—by tending to think out of the box and eventually becoming a pioneer. Over the years, I have had my share of excitement because of it. I would like to share a few of my experiences with you.

OPEN LAPAROSCOPY

In the summer of 1969 fresh out of residency, I attended a postgraduate course on laparoscopy during the annual meeting of the American Fertility Society in Miami. It was the first such course in the US and was directed by Dr. Robert Dillon from New York. I was very impressed. However, I did not appreciate the way the abdomen was being insufflated blindly with a needle before being accessed blindly with a sharp trocar. I thought that performing 2 blind procedures as a prelude to better visualization of the abdominal cavity did not make sense. I asked the faculty whether it may not be better to make a small mini-laparotomy incision to gain access to the abdomen under vision and then insufflate it with gas and proceed. The response was politely dismissive. When I returned to Chicago, I scheduled a laparoscopy/possible laparotomy on a fairly obese young nulliparous woman with a presumptive diagnosis of polycystic ovaries. I had a hard time getting in with a sharp trocar. After a look, I decided to open her to do a wedge resection that was a standard approach in those days. I looked up under the abdominal wall to see how big the entry wound was and was amazed to find that it was much larger than expected, because of the slant of the trocar. It was at this point that I decided to find another way.

I needed a device to plug the opening made in the abdominal cavity to prevent escape of the pneumoperitoneum gas. The cone configuration was a natural if not obvious conclusion. I also needed to have suture holders to fix sutures placed in the fascia on the cannula and stabilize it vis-à-vis the abdominal wall. Before settling on the cone idea, I experimented with a flat disc with and without adhesive and 2 balloons separated by about 2cm; the cone/suture holders worked best.

I performed the first open laparoscopy in August 1970 at Grant Hospital of Chicago and published a “Communication in Brief” in the American Journal of Obstetrics and Gynecology in 1971. However, I was not able to perform open laparoscopy at Illinois Masonic Hospital, which was my primary hospital. The Ob/Gyn chairman insisted that I had to prove the technique on rabbits first. In response, I moved my practice to Grant Hospital, where laparoscopy was not yet done and where the chairman was much more cooperative. To encourage the skeptical president of Grant Hospital, I purchased all the laparoscopy equipment with the understanding that the hospital would reimburse me if the technique was adopted by other doctors. I was reimbursed in less than a year.

The next crisis occurred in 1973 when I tried to publish a report on the first 150 cases of open laparoscopy. I sent the manuscript to the American Journal of Obstetrics and Gynecology, which had published my first brief report. The rejection letter dated May 21, 1973 was depressing and demeaning. The reviewer was apparently very annoyed by the submission and brutal in his remarks. Two phrases are quoted verbatim as examples: “From reading
all this detail, the reader is impressed that ‘open laparoscopy’ is not worth the effort – if a laparoscopy is necessary, do laparoscopy, if a laparotomy is necessary do one!” and “The fact that Hasson spends so much time and energy in this table again points up the rather ludicrous nature of the operation.” As a young doctor, I was crushed. Fortunately, the American Association of Gynecologic Laparoscopists came along, and I was able to present at their meeting and to publish in their journal.3

I then went on a mission to promote the technique of open laparoscopy. It took 10 years, but I persevered in spite of rejections, frustrations, and almost insurmountable opposition. I produced an exhibit that was shown at 10 national and international meetings, conducted 7 yearly workshops with live surgery at Grant Hospital from 1979 to 1985, and made numerous presentations and 3 videos. Dr. Jeff Penfield (Syracuse, NY) was among the established leaders of closed laparoscopy. However, he became an early advocate of open laparoscopy and teamed up with me crisscrossing the country for several years speaking, debating, arguing, publishing, and giving interviews to the medical press. Dr. Penfield was a pioneer of open laparoscopy and as such he was attacked frequently. He made a tremendous contribution to the acceptance of open laparoscopy.

Acceptance of the technique was slow among fellow gynecologists. However, it did come. In 1977, the American Fertility Society awarded me the Certificate of Merit for the Outstanding Exhibit in the Field, and in the early 1980s open laparoscopy was named the “Hasson Technique” and listed in the current procedure terminology (CPT) book. When general surgeons embraced laparoscopy in the late 1980s and early 1990s, the technique became widely accepted and mainstream.

One of my most cherished rewards is a set of 2 letters written in long hand by Raoul Palmer, which I have framed and hung in my office. When I met him in Madrid in 1980, he wanted to try the open laparoscopy method and asked me to send him the instructions and “film.” I did not because I thought that Palmer was just being nice. Surely, the man who invented and pioneered the closed method of laparoscopy did not need to try another method. I was wrong. Dr. Palmer wrote me on October 12, 1980 reminding me about his request and asking about specific details of the technique. Dr. Palmer’s second letter was dated February 14, 1981. He informed me that my “film” and instruments arrived safely, that the film was shown in Paris, and that he had just performed his first open laparoscopy. Palmer was most complimentary and asked to keep the film to show it to the French College of Celioscopists in May 1981 (which he did).

UNSUCCESSFUL ENDEAVORS

Open laparoscopy was a successful project. Others were not.

Custom Fitting of IUDs

Intrauterine contraception represents a satisfactory method of birth control. I proposed the concept of custom fitting IUDs to increase their efficiency and diminish their side effects and invented the Wing Sound device to measure the individual length of the endometrial cavity to facilitate individual fitting of IUDs.4,5 I spent a great deal of time and energy promoting the concept, but I did not succeed.

Sutureless Skin Closure

I invented a sutureless skin closure that minimizes scar formation and can be used in more skin closure applications.6 However, I was unable to bring it to market.

Topical Uterine Anesthesia

It seemed to me that the mucous membrane of the endometrial cavity should be sensitive to topical anesthesia, as other mucous membranes in the body are. I performed preliminary clinical studies that were promising.7 However, the company that had tentatively agreed to market the application terminated the project after evaluating the cost of FDA approval.

EXPANDING THE ENVELOPE OF LAPAROSCOPIC SURGERY

I have been a long-time advocate of laparoscopic surgery because I became convinced of its many benefits.

Laparoscopic Treatment of Endometriosis

In 1974, I scoped a patient, who was an airline stewardess, for severe pelvic pain. I found an endometriotic nodule on her uterosacral ligament and decided to ablate it using electrosurgery. When the patient experienced dramatic pain relief, I started a clinical study to evaluate this approach. I encountered a major conflict with the director of gynecology of a major university hospital in Chicago where I was doing some of my work. The confrontation was not pleasant. I submitted a manuscript about laparoscopic treatment of endometriosis using electrosurgery to
the Chicago Gyne Society, but the paper was rejected. I had to wait another year for more friendly leadership in the organization. Subsequently, the paper became the lead article of an issue of the *American Journal of Obstetrics and Gynecology* in 1979. It represents the first report on the subject in the peer-reviewed English literature. My opponents claimed that using electrosurgery in the abdomen was extremely dangerous. However, the practice became the standard of care within 2 to 3 years. Dr. Camran Nezhat, a pioneer in the field, expounded on this early work and extended it to new frontiers.

**Laparoscopic Management of Ovarian Cysts**

I was among the pioneers who introduced the concept of laparoscopic treatment, with appropriate safe guards, of ovarian cysts. Concern about malignancy and inadequate treatment caused my work to be rejected and delayed for 2 years before finally being published. Again, the paper presented at the Chicago Gyne Society was heavily criticized. The academician who discussed it attacked me on a personal level saying that people in private practice should not be doing this and exposing patients to harm. However, again the technique became the standard of care within 3 years to 4 years.

**Laparoscopic Myomectomy and Supracervical Hysterectomy**

My pioneering work with these 2 procedures followed the same pattern. Initially, they were thought to have no merit but are currently in the main stream. One of my professor friends in Chicago once told me: “I hear you but I do not believe you” (in reference to deep myoma removal). I was criticized and attacked in many forums and in many circles for doing these procedures. My appeal that the cervix is not a useless organ and should not be removed without indication is still controversial, but the operation is now main stream.

**PARADIGM SHIFT IN SURGICAL EDUCATION**

My current interest in promoting a new paradigm in surgical education and training based on computerized simulations and web-based learning is on-going. It is shared by many pioneers, such as doctors Rick Satava, Elspeth McDougall, and LeRoy Heinrichs. SLS has been on the cutting edge in this regard.

**THE REWARD**

I once sat in a small plane next to a professor from the University of Chicago who was the mentor of a good friend of mine. We were on our way to a small town in southern Illinois to celebrate my friend's accomplishments and success. We started talking about what we did and what made us tick. After a while, the professor paused for a second, looked me in the eye and said: “You must be a masochist; people who espouse new ideas usually are.”

I have thought about this for a long time. I do not believe that I enjoy inflicting pain on myself. I do believe that there is a price to pay for being a pioneer. Overcoming apathy to change is probably the most constant and frustrating problem. On the other hand, there are many rewards to being a pioneer. Enjoying the camaraderie of people who are similarly engaged in the pioneering endeavor is fulfilling. Getting recognition and accolades is great. Immersing yourself in the quest with passion and determination brings meaning to your life. However, at the end of the day, seeing your ideas in practice, knowing that you may have helped advance human endeavor in some small way is the most gratifying.

Fellow pioneers, I salute you. I know that there are many of you in SLS. Keep it up.

**References:**

1. Webster's Dictionary of the English Language.
2. Hasson HM. A modified instrument and method for laparoscopy. *Am J Obstet Gynecol.* 1971;110:886–887.
3. Hasson HM. Open laparoscopy: a report of 150 cases. *J Reprod Med.* 1974;12:234–238.
4. Hasson HM. Clinical applications of the Wing Sound device. *Obstet Gynecol.* 1974;43:498–506.
5. Hasson HM, Berger GS, Edelman DA. Factors affecting IUD performance: I. endometrial cavity length. *Am J Obstet Gynecol.* 1976;126:973–981.
6. Hasson HM, Nicoloff D, Ford CR, Lazarus H, O'Donoghue JB, Powell JR. A new sutureless technique for skin closure. *Arch Surg.* 1976;111:83–84.
7. Hasson HM. Topical uterine anesthesia: a preliminary report. *Int J Gynaecol Obstet.* 1977;15:238–240.
8. Hasson HM. Electrocoagulation of pelvic endometriotic lesions with laparoscopic control. *Am J Obstet Gynecol.* 1979;135:115–121.
9. Hasson H.M. Laparoscopic management of ovarian cysts. *J Reprod Med.* 1990;35:863–867.
10. Hasson HM, Rotman C, Rana N, Sistos F, Dmowski WP. Laparoscopic myomectomy. Obstet Gynecol. 1992;80:884–888.

11. Hasson HM, Rotman C, Rana N, Asakura H. Experience with laparoscopic hysterectomy. J Am Assoc Gynecol Laparosc. 1993;1:1–11.

12. Hasson HM. Cervical removal at hysterectomy for benign disease: risks and benefits. J Reprod Med. 1993;38:781–790.

13. Hasson HM. Core competency in laparoendoscopic surgery. JSLS. 2006;10:16–20.