Diseases of the Colon& Rectum

Presidential Address

Serendipity, Humility, and Dumbo's Feather

Richard P. Billingham, M.D.

t has been my honor to serve as your President lacktriangle during this past year. The American Society of Colon and Rectal Surgeons celebrates its 104th year with this meeting and is a unique group, numbering more than 2,300 members worldwide. It is a very different group from others with which I have been associated, likely because of the warm and affable personalities of those who have chosen a career in colon and rectal surgery. Newcomers to our meetings are immediately made to feel welcome, and long-term friendships are easily formed. Most of my best friends have been made within the context of this Society, as well as its sister organizations, the American Board of Colon and Rectal Surgery, the Research Foundation of the ASCRS, and the Association of Program Directors in Colon and Rectal Surgery.

A feature that is perhaps unique in our Society is not the number of people whom we know on a firstname basis, but those who are universally known by their first names alone. Examples are:

Ira (Ira Kodner)
Stanley (Stanley Goldberg)
Johnny (John Mackeigan)
Vic (Victor Fazio)
Byron (Byron Gathright)
Sam (Sam Labow)
Heidi (Heidi Nelson)
Randy (Randy Bailey)
Graham (Graham Newstead)
Yanek (Yanek Chiu)

Richard P. Billingham, M.D.

Sergio (Sergio Larach) Ann (Ann Lowry) Stella (Stella Zedalis)

A former mentor, Dr. Lucius Hill, was fond of saying "Well, are we gonna stand around and philosophize, or are we gonna cure this patient?" The prospect of philosophizing meaningfully with you for 20 minutes troubles each President. But as I pondered this, I wondered: what brought us to this point in our

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careers, what keeps us here, and what will our future bring? The three concepts embodied in the title of this talk seem to me to sum up our past, present, and future: serendipity, humility, and Dumbo's feather.

SERENDIPITY

Each of us is here today because of serendipity: a series of fortunate accidents that have determined the direction of our lives, our careers, our families. Serendipity has been defined as "an aptitude for making fortunate discoveries accidentally." These are discoveries made while actually in pursuit of something else, finding something that is NOT being sought. The history of science is filled with such accidental discoveries, among them Alexander Fleming's discovery of penicillin, Alfred Nobel's discovery of dynamite, and even the chance landing of Christopher Columbus in the New World. Our lives have been influenced by where we were born, who our parents were and what they did for a living, the chance influences and aptitudes discovered during our schooling and college, where we selected to go for the various aspects of our medical training, whom we met in our journey, the surgical training program we attended and who we met there, the mentors in general and colorectal surgery with whom we came in contact, and the dozens of chance encounters, some even in the last few days, that have brought us here today to this auditorium. The major factor in each of these decisions, large or small, has been serendipity.

HUMILITY

Humility does not come easily to most surgeons, or to others who often can manipulate the environment. It often is learned from a cycle of arrogance and humility that starts in school, with the first grader being very humble and the sixth grader arrogant, until moving up to a new school in which the new seventh grader is again at the bottom of the familiarity and confidence curve when humility is again forced on him. Such is the case with medical school, with the timid first-year student gradually developing selfconfidence, and with it a measure of arrogance, as a fourth-year student, only to be reduced again to humility as an intern, becoming very confident as a chief resident, and the cycle repeated again when the surgeon enters practice, and over the years gains confidence and often arrogance.

A steady state of humility evolves from the realization, over time, that we often cannot control our environment; we are reminded of this by life events, such as the lawsuit filed by the patient for whom we did our very best, the patient whose suffering and death we could not prevent, the economic or reimbursement situations that we cannot control, the patient with the poor result when most of our patients with the same condition have an excellent result.

So too do humbling situations occur outside of our professional lives: the rebellious teenager who spurns our advice and challenges the notion of parental control; marital relationships that may deteriorate over time, despite our best efforts; and our own health issues and the recognition of our own mortality.

Does humility come more easily to colon and rectal surgeons, who toil in the fundament and nether regions of the body? Our ministering to our patients' anorectal woes has been compared to a biblical expression of true humility, that of Jesus washing the feet of his disciples. But a mature attitude of humility comes from our realization that caring is more achievable than curing. This often develops with the understanding that palliation is not confined to malignant or fatal conditions; the patient with levator syndrome, or fecal incontinence, or irritable bowel syndrome can usually be made much better, even if cure cannot be achieved. And it also is this mature quality of humility, of acceptance of our own limitations, that allows us to seek and accept advice, to be honest with our patients about what we can or cannot predictably do, and to recognize the need for further learning. Humility allows us to admit our errors and to learn from them. Humility also may prepare us for serendipitous selfeducation.

DUMBO'S FEATHER

Parables form an important basis of cultural teaching. In the story of Dumbo the baby elephant, Dumbo is born to his circus-performing mother and has unusually large ears from birth. This is considered a terrible handicap until he finds a mentor, one Timothy Mouse, who believes this liability might be turned into an asset and attempts to teach Dumbo to use these ears as wings to fly. After repeated failures, including the attempts of a cadre of professional teachers and fliers to teach Dumbo to fly, one teacher seizes on the idea of giving Dumbo a "magic feather," and convinces him that by holding the magic feather, he will be empowered to fly. Indeed, Dumbo believes his mentors, and grasping the magic feather, he real-

¹ Dumbo © 1941, The Walt Disney Company

izes he can fly. Because the magic feather and the flight occurred simultaneously, he believes that this demonstrates cause and effect—that he can only fly because of the magic feather.

On the basis of Dumbo's discovery, his mentor encourages him to use his new skill as part of his daily circus routine. The first time he tries to do so, however, he loses the magic feather and endures a terrifying period of self-doubt. Only at the urging of a desperate and highly involved mentor does Dumbo realize that the magic feather was just a crutch and that his own innate skill and capacity are what really allow him to fly.

How is Dumbo's experience like our own? Like Dumbo, we have been encouraged by our mentors to follow certain practices and traditions and have been told these practices are necessary to achieve a desired result. Examples of these abound:

Routine use of nasogastric tube prevents ileus. Early feeding causes ileus.

Must have bowel sounds in all four quadrants before beginning postoperative feeding.

Wounds and abscesses must be packed "so they will drain."

Drains are necessary for pelvic anastomoses.

Primary anastomosis cannot safely be done without a mechanical bowel prep.

Oral antibiotics are necessary for antimicrobial prophylaxis.

Continuation of prophylactic antibiotics is needed after completion of surgery.

Nitroglycerine helps anal fissure healing.

Drinking eight glasses of water a day is beneficial for health.

Patients with diverticula need to avoid seeds and nuts.

Laparoscopic-assisted colon resection provides better outcomes.

Common elements of our use of these practices are that they are endorsed by mentors, we are told they constitute the standard of care, and we are discouraged from seeking evidence to the contrary. And nowhere are these practices more rampant than during the period of perioperative care. Cause and effect are too frequently assumed from the fact that two or more processes occur simultaneously.

We have come to believe that each of these practices *causes* a desired *effect* or clinical outcome, just as Dumbo believed that the magic feather caused him to be able to fly. And we *want* to believe in such causeand-effect links, because it gives us the illusion of

control of the disease process, just as we *want* to believe that the magician's wand is indeed magic, and that the rabbit appears in the hat *because of*, not incidental to, the magic wand.

Only in the last few years are we beginning to question these assumptions, with new emphasis on areas of perioperative care. Some of these time-honored practices are now being found to be detrimental, uncomfortable, or counterproductive. Getting beyond these irrational beliefs requires both serendipity and humility. Sometimes the stimulus for such questioning is the result of serendipity: the patient who is inadvertently discharged immediately following an Altemeier procedure, but has no ill effects; the patient who accidentally gets fed the day after an abdominal colectomy, and an accelerated recovery results; the man whose urinary catheter falls out the evening of an abdominoperineal resection, yet who voids without difficulty; the abdominal surgery patient whose perioperative course is identical to the patient who had a laparoscopic approach. And, when serendipity provides us with such examples, it is humility that allows us to take notice, makes us remember that less than 30 percent of our surgical practice is based on evidence other than empiricism, and that only approximately 5 percent of articles in the surgical literature are controlled trials. Humility allows us to consider new explanations for observed phenomena; it is humility that allows us to relearn things we thought we knew.

Our participation in the process of professional education actually facilitates our examination and questioning these assumptions of cause and effect. First, we are exposed to young men and women with an intellectual curiosity less likely to accept a mentor's endorsement of time-honored practice as the equivalent of evidence-based medicine. These students and residents help us to question such assumptions and practices. Second, through the energy and intellectual curiosity of trainees, methods can be found to study these processes, to learn from these studies, and to report the results to our colleagues in the world community, with the result of abandoning irrational practices and improving overall care.

As surgeons, it is our obligation to continue to seek improved methods of helping patients to overcome disease processes. A major and hitherto overlooked area has been that of recovery from surgical procedures and the issues surrounding perioperative care. As a result of questioning many of the "Dumbo's feathers" in this area, and the subsequent study of

these practices, in the last 20 years, we have learned: Routine use of a nasogastric tube after abdominal colorectal surgery is unwarranted and detrimental.

Perioperative antibiotics need not be continued after the patient leaves the operating room.

Patients can safely begin oral intake by the first postoperative day.

Aggressive early ambulation diminishes the risk of pneumonia and deep venous thrombosis.

Use of intra-abdominal drains to "protect" against anastomotic leak is ineffective.

A mechanical bowel prep before colorectal surgery may not always be necessary.

Wound infections usually heal better and faster without "packing."

Patients can nearly always be discharged immediately following anorectal surgical procedures.

And based on such studies, surgeons whose humility allows them to accept this evidence and change their practices accordingly have been able to shorten the duration of hospitalization after surgery, to diminish the morbidity of such surgery, and permit more rapid patient recovery. This real progress has been made possible by serendipity, with the occurrence of unexpectedly beneficial results, the humility of one or more surgeons to notice these results, and the ability to recognize some of our "Dumbo's feathers" for what they were, and through evidence-based medicine, tell the rest of us what they discovered.

In conclusion, I'd like you to remember in each of your lives the importance of serendipity, humility, and Dumbo's feather. Expect serendipity, celebrate it, accept it. Celebrate human contact, collegiality, patient interaction through which serendipity is fostered. And, when something unexpected happens, NOTICE! Pay attention! Remember humility and be cautious in your self-confidence, particularly around the issue of physiologic processes about which we know painfully little. And regarding Dumbo's feather, try to recognize when you're using a practice for which cause and effect have not been established, question "conventional wisdom," and seek evidencebased answers to such questions of patient management, particularly in less well-studied areas such as the perioperative period.

I'd like to leave you with five key precepts of practice, paraphrased from the writings of Dr. Ferrol Sams, author and family physician from Fayetteville, Alabama (but which might as readily come from "Ira"), which I believe embody the principles of serendipity, humility, and Dumbo's feather:

Take care of sick folks

Listen to what your patients are tellin' ya

Don't be greedy

Love one another

Don't be stupid

It has been my privilege to serve as your President this past year, and I am profoundly grateful for the opportunity.