

Flexible Sigmoidoscopy and the Despecialization of Endoscopy

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A brief historical review is useful to appreciate the current and evolving status of endoscopy in the office. The most notable example of this change has been the use of the 35-cm flexible sigmoidoscope and the 60-cm short colonoscope by the family physician. Several generations of physicians have routinely utilized rigid sigmoidoscopy. Diagnostically, the instrument was of value in the investigation of rectal bleeding, diarrhea, and other related symptoms. Therapeutically, physicians treated hemorrhoids and removed polyps with the rigid sigmoidoscope. In the 1960s medicine was changing rapidly. As general practitioners with broad-based office and hospital skills retired, they were replaced primarily by subspecialists. These new physicians were supported by a burgeoning technology and a reimbursement environment that rewarded the use of this technology.

As physicians sought areas in which this technology could be applied, medicine became increasingly concerned with the psychosocial and preventive aspects of illness. The American Board of Family Practice was established in 1969. Concurrently, the adenoma-carcinoma sequence was being established in long-term studies by Hertz et al, Gilbertson, Winawer et al, and others.¹⁻⁴ The first fiberoptic colonoscopes were marketed by Olympus and Machida in 1969. Three lengths were available, the shortest of which resembled what is today known as the 60-cm flexible fiberoptic sigmoidoscope. The study of gastrointestinal disease was dramatically assisted, and these instruments became a cornerstone of training fellowships in gastroenterology. During the 1970s, colorectal neoplasia was one of many diseases described in new di-

mensions by endoscopy. Furthermore, treatment of many neoplastic polyps was now possible without laparotomy. This patient care benefit was of sufficient magnitude that in 1980 the American College of Surgeons decided that all training for general surgeons should include gastrointestinal endoscopy (upper and lower).

In 1979 the recently developed short colonoscopes (60- to 65-cm) were felt to be a partial solution to the longstanding problem of underutilization of sigmoidoscopy by primary care physicians. Some questioned the appropriateness of this training for family physicians and other office-based generalists.^{5,6} Nevertheless, studies demonstrated the effective use of these instruments in the hands of primary care physicians.⁷⁻⁹ Compared with rigid sigmoidoscopy, diagnostic yields were improved. Family physician findings were commensurate with diagnostic yields published by subspecialists. Morbidity was low and patient acceptance was excellent. Of utmost importance were documented increases in physician and patient compliance with recommended colorectal cancer screening guidelines.^{10,11}

In September of 1983, a conjoint course on flexible sigmoidoscopy was sponsored by the American Academy of Family Physicians (AAFP) and the American Society for Gastrointestinal Endoscopy (ASGE)¹² This event marked the end of the controversy over rigid vs flexible sigmoidoscopy in the office of family physicians. Controversy now focuses on the length of the endoscope. Despite evidence citing increased diagnostic yield with the 60-cm short colonoscope,^{9,13} gastroenterologists continue to recommend the 35-cm flexible sigmoidoscope for family physicians.^{14,15} The initial AAFP-ASGE course was taught with a 35-cm flexible sigmoidoscope at the request of gastroenterologist colleagues. At the request of family physicians, the conjoint committee also designed training for family physicians with the 60-cm short colonoscope, a highly appropriate move, as 77 percent of physicians acquire the 60-cm short colonoscope rather

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than the 35-cm flexible sigmoidoscope.¹⁶ Approximately 10 percent of nonfellowship trained endoscopists are progressing to 180-cm colonoscopy.¹⁶

There are approximately 57,000 members of the American Academy of Family Physicians and 378 accredited residency training programs in the specialty of family practice. Seventy-five percent of these programs now teach either flexible sigmoidoscopy or limited colonoscopy, and this number is growing. The American Academy of Family Physicians and the American Society for Gastrointestinal Endoscopy have established a national network of endoscopy preceptors for office-based family physicians who wish to learn flexible sigmoidoscopy or limited colonoscopy. At this time 800 family physicians and gastroenterologists are qualified to teach this procedure in conjunction with a combined course of home study and preceptorship. The strength of this development results from these physician-educators being based in communities and not exclusively in tertiary care centers.

If the increasing availability of endoscopy increases the frequency of colorectal cancer screening, prospective randomized clinical trials will still be required to document public health benefits. Preliminary studies suggest tangible patient care benefits.¹⁻⁴ Outcome studies with other endoscopic procedures performed by family physicians would also be desirable (eg, telescopic laryngoscopy,¹⁷ gastroscopy^{18,19}). These studies could avoid the tertiary care bias and referral bias found in most of the medical literature describing endoscopy. Much of this bias was a natural side effect of an efficient medical research system. However, endoscopy in the generalist's office deserves further unbiased study.

Whether all family physicians, general internists, and osteopathic physicians join the ranks of practicing endoscopists remains to be seen. Protocols for the performance of upper gastrointestinal endoscopy, full 180-cm colonoscopy, and nasolaryngoscopy are currently under way. If the experience of the past ten years is an accurate guide, the numbers of endoscopists will continue to grow regardless of intraprofessional discussion and controversy.

If fee schedules for endoscopy are adjusted downward, these adjusted fee schedules may decrease intraprofessional competition for endoscopy privileges. Simultaneously, capitated health care systems may provide a positive incentive for endoscopy by the primary care physician. Office-based endoscopy can provide important diagnostic and therapeutic benefits. Hospital-based or tertiary care consultants should

concentrate on difficult diagnostic or therapeutic cases. The despecialization of endoscopy might be a natural and sought-after change within the medical profession through continuing medical education.

References

1. Hertz RE, Deddish MR, Day E: Value of periodic examinations in detecting cancer of the rectum and colon. *Postgrad Med* 1960; 27:290-294
2. Gilbertson BA: Proctosigmoidoscopy and polypectomy in reducing the incidence of rectal cancer. *Cancer* 1974; 34(suppl):936-939
3. Enterline HT: Polyps and cancer of the large bowel. *Curr Top Pathol* 1976; 63:97
4. Winawer SJ, Andrews M, Flehinger B, et al: Progress report on controlled trial of fecal occult blood testing for the detection of colorectal neoplasm. *Cancer* 1980; 45:2959-2964
5. Schapiro M: Who should be doing gastrointestinal endoscopy? *JAMA* 1981; 245:577
6. Felmar E, Rodney WM, Schapiro M: Who should do gastrointestinal endoscopy? *JAMA* 1981; 246:1301
7. Hocutt JE, Jaffe R, Owens GM, Walter DT: Flexible fiberoptic sigmoidoscopy. *Am Fam Physician* 1982; 26:133-141
8. Johnson RA, Rodney WM, Quan M: Outcomes of flexible sigmoidoscopy in a family practice residency. *J Fam Pract* 1982; 15:785-789
9. Johnson RA, Quan M, Rodney WM: Continued assessment of flexible sigmoidoscopy in a family practice residency. *J Fam Pract* 1984; 18:723-727
10. Rodney WM, Quan MA, Johnson RA, Beaber RJ: Impact of flexible sigmoidoscopy on physician compliance with colorectal cancer screening protocol. *J Fam Pract* 1982; 15:885-889
11. Rodney WM, Beaber RJ, Johnson RA, Quan M: Physician compliance with colorectal cancer screening (1978-1983): The impact of flexible sigmoidoscopy. *J Fam Pract* 1985; 20:265-269
12. Rodney WM, Felmar E, Auslander M: AAFP-ASGE conjoint course on flexible sigmoidoscopy. *Fam Pract Res J* 1986; 5(4):209-215
13. Hocutt JE, Jaffe R, Owens GM, Walters DT: Flexible sigmoidoscopy in family practice. *Am Fam Physician* 1984; 29:131-138
14. Zucker GM, Madura MJ, Chmiel JS: The advantages of the 30-cm flexible sigmoidoscope over the 60-cm flexible sigmoidoscope. *Gastrointest Endosc* 1984; 30:59-64
15. Winawer SJ: Detecting colorectal cancer: Choosing the best test. *Diagnosis* 1985; 7(10):91-102
16. Rodney WM, Albers G: Flexible sigmoidoscopy outcomes following two types of CME. *Am J Gastroenterol* 1986; 81:133-137
17. Geyman JP, Kirkwood R: Telescopic laryngoscopy. *J Fam Pract* 1983; 16:789-791
18. Woodliff DM: The role of upper gastrointestinal endoscopy in primary care. *J Fam Pract* 1979; 8:715-719
19. O'Laughlin JC: Endoscopy in family practice, letter, Woodliff DM, reply. *J Fam Pract* 1979; 9:1000-1001