



Invited Commentary

Individualized care or ad hoc care: Is evidence based, personalized care for diverticulitis currently possible?



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Dr. Melio and colleagues have provided intriguing data regarding the topic of counseling new patients referred to a surgical clinic for the management of sigmoid diverticulitis. The authors used semi-structured interviews of 3 colorectal surgeons consulting on 27 consecutive out-patients during a 3-month interval, applied prior to and following patient consultations. The authors evaluated how often treatment recommendations changed following the consultation compared to a surgeon's pre-clinic opinion based on available clinical data. In a complex study cohort where 44 % of patients had complicated disease, for all but one patient, surgeons believed they had all the information required to offer a recommendation. Prior to consultation, surgeons favored surgical intervention (70 %), while this recommendation decreased to 58 % after conversing with patients.

The authors correctly describe that the best current data does not support previous practice patterns of recommending surgery based solely on the number of prior episodes of disease. Part of this evolution of thought comes from population level data demonstrating that freely perforated episodes of diverticulitis requiring emergency surgery and, often, a colostomy, are most common at a patient's first lifetime episode of diverticulitis [1]. Thus, recommending elective surgery to a patient to help them avoid a future perforation requiring emergency abdominal surgery turns out to be a largely unfounded concern. With observational studies suggesting that even patients with a history of complicated episodes may enjoy lengthy intervals of symptom-free living [2], individualizing patient care is now the most frequently recommended approach.

However, it may be difficult to individualize patient care with any degree of precision when none of us can explain why patients develop diverticulitis. What usually concerns patients, foods with seeds and nuts, is unlikely to be the cause [3,4], and just how much diet plays a direct role is not clear. Possible roles for the microbiome and genetics have been suggested [5,6], though remain unproven. The condition is now increasingly seen as an inflammatory illness which may or may not be associated with an infection, and whether our recommendations for dietary modification decrease the risk for recurrent episodes is both difficult to study and largely unproven. Much like the traditional use of low residue diets following intestinal surgery, it is unclear if the successes or failures of fiber supplementation in preventing recurrent episodes of diverticulitis are causally related to a patient's course since the

pathophysiology of the disease remains so poorly defined. As an additional challenge toward further scientific study, unlike many diseases, there is no established animal model to study diverticulitis, and it is not clear if mice, rats, pigs, or rabbits develop diverticulatae [7].

Table 1 of this study is interesting, given the overlap between the factors that were influential in recommending non-operative and operative interventions. Patients often present for consultation with pre-conceptions regarding what their treatment should entail, or having been counseled by a referring provider as to what the treatment should be. Consulting surgeons face these preconceptions with an understanding that while the number of prior episodes is a crude prognostic tool for many patients, our lack of understanding about the pathophysiology of the disease makes many of our recommendations an educated guess. It seems reasonable that frequent recurrences warrant consideration for surgery, and there is data indicating that a patient's quality of life is likely to be improved with surgery if frequent abdominal pain is a chief complaint [8]. Our slower approach toward elective surgery, on the whole, represents an improvement in management, and it is likely that for many patients, there may not be a single correct recommendation, allowing surgeons to safely defer to patient preferences and acknowledging that observation and surgery each have their advantages and disadvantages. Whether surgeon or patient preferences are based on a veridical understanding of the disease is another question, and one prerequisite for what we might refer to as personalized care.

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CRedit authorship contribution statement

David B. Stewart: Conceptualization, Data curation, Formal analysis, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The author has no conflicts to report.

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