Gastroenterology 2014;147:702–705

AGA SECTION

Crohn's Disease Evaluation and Treatment: Clinical Decision Tool

William J. Sandborn

Division of Gastroenterology, University of California San Diego, La Jolla, California

The treatment of Crohn's disease is in evolution. Historically, patients were treated based on clinical symptoms. Today we understand that clinical symptoms correlate poorly with the underlying inflammation of the disease as demonstrated by endoscopy, histology, computed tomography or magnetic resonance imaging enterography studies, and biomarkers of inflammation such as C-reactive protein (CRP). Furthermore, we understand that treatment goals such as symptomatic response and remission are insufficient, because they do not ensure that the underlying inflammation has resolved, and thus they do not prevent disease progression to complications of stricture, fistula and abscess, which in turn lead to hospitalization and surgery. The combination of symptom remission and endoscopic remission has been dubbed deep remission.[1] The use of deep remission as a treatment goal is finding its way into both clinical trials and clinical practice. The process of assessing patients with endoscopy prior to making important treatment decisions, then instituting a change in therapy in symptomatic patients who have objective evidence of inflammation, then reassessing the patient within 6 months to ensure that deep remission has occurred, has been dubbed treat to target where the target is deep remission.[2] Treatment options have also evolved based on evidence from controlled trials. We have moved from mesalamine and antibiotics for low-risk patients and steroids, azathioprine, and methotrexate for moderate-to- severe disease, to budesonide, steroids and azathioprine for low-risk patients, and biologic therapy with tumor necrosis factor (TNF) antagonists (ideally in combination with azathioprine) and integrin antagonists for high-risk patients.[3] Therapeutic drug monitoring is applied to help guide decision making in patients treated with biologic agents who lose response.[4] The American Gastroenterological Association (AGA) Institute clinical support tool, "Identification, Assessment, And Initial Medical Treatment In Crohn's Disease," weaves these concepts together into a practical algorithm to help clinicians assess patients for active inflammation and the presence of complications and co-morbid conditions, risk stratify their patients, apply the therapies shown to be effective in the AGA Institute document, "Guideline on the Use of Thiopurines, Methotrexate, and Anti-TNF-α Biologic Drugs for the Induction and Maintenance of Remission in Inflammatory Crohn's Disease,"[3] and ensure that patient's underlying inflammation is sufficiently treated. This clinical support tool represents a big step forward for the treatment of Crohn's disease. However, it is really a first step and more remains to be done. As a separate exercise, both the AGA Institute and the Crohn's and Colitis Foundation of America (CCFA) have developed quality indicators for inflammatory bowel disease.[5,6] The initial versions of these quality indicators are focused on things that can be easily measured, (eg, vaccinations, measuring bone density, and administering steroid sparing medications) and on demonstrating that it is possible to reduce practice variation. One could reasonably argue that these quality indicators need to be refocused on the primary tasks that face physicians who treat Crohn's disease, ie, treating the underlying inflammation to resolution.

Thus, a future opportunity for convergence of this clinical support tool and quality indicators related to Crohn's disease. In addition, there are other areas that are likely critical to optimizing patient outcomes, like providing psychosocial care, which must be better defined and then incorporated into clinical practice. With the well justified push towards providing better value in healthcare, we will ultimately need to have clinical support tools that focus on treating the underlying disease as well as the whole person, quality improvement programs that focus on reducing practice variations related to these clinical support tools, and cost utility analyses to help us better select therapies that provide value to patients and to society.

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0016-5085/$36.00
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Reprint requests
Address requests for reprints to: William J. Sandborn, MD, Division of Gastroenterology, 9500 Gilman Dr #0956, La Jolla, California 92093. e-mail: wsandborn@ucsd.edu; fax: (858) 657-5022.

Conflicts of interest
The authors disclose the following: WJS reports having received consulting fees from ActoGeniX NV, AGI Therapeutics, Inc, Alba Therapeutics Corporation, Albireo, Alfa Wasserman, Amgen, AM-Pharma BV, Anaphore, Astellas Pharma, Athersys, Inc, Atlantic Healthcare Limited, Axcan Pharma (now Aptalis), BioBalance Corporation, Boehringer-Ingelheim Inc, Bristol Meyers Squibb, Celgene, Celek Pharmaceuticals, Cellerix SL, Cerimon Pharmaceuticals, ChemoCentryx, CoMentis, Cosmo Technologies, Coronado Biosciences, Cytokine Pharmasciences, Eagle Pharmaceuticals, Eisai Medical Research Inc, Elan Pharmaceuticals, EnGene, Inc, Eli Lilly, Enteromedics, Exagen Diagnostics, Inc, Ferring Pharmaceuticals, Flexion Therapeutics, Inc, Funxional Therapeutics Limited, Genzyme Corporation, Genentech (now Roche), Gilead Sciences, Given Imaging, Glaxo Smith Kline, Human Genome Sciences, Ironwood Pharmaceuticals (previously Microbia Inc), Janssen (previously Centocor), KaloBios Pharmaceuticals, Inc, Lexicon Pharmaceuticals, Lycera Corporation, Meda Pharmaceuticals (previously Alaven Pharmaceuticals), Merck Research Laboratories, MerckSerono, Millennium Pharmaceuticals (subsequently merged with Takeda), Nisshin Kyorin Pharmaceuticals Co, Ltd, Novo Nordisk A/S, NPS Pharmaceuticals, Optimer Pharmaceuticals, Orexigen Therapeutics, Inc, PDL Biopharma, Pfizer, Procter and Gamble, Prometheus Laboratories, ProtAb Limited, Purgenesis Technologies, Inc, Receptos, Relypsa, Inc, Salient Pharmaceuticals, Salix Pharmaceuticals, Inc, Santarus, Schering Plough Corporation (acquired by Merck), Shire Pharmaceuticals, Sigmoid Pharma Limited, Sirtris Pharmaceuticals, Inc (a GSK company), S.L.A. Pharma (UK) Limited, Targacept, Teva Pharmaceuticals, Therakos, Tillotts Pharma AG (acquired by Zeria Pharmaceutical Co, Ltd), TxCell SA, UCB Pharma, Viamet Pharmaceuticals, Vascular Biogenics Limited (VBL), Warner Chilcott UK Limited, Wyeth (now Pfizer); has received lecture fees from Bristol Meyers Squibb, and Janssen (previously Centocor); and has received research support from Bristol Meyers Squibb, Genentech, Glaxo Smith Kline, Janssen (previously Centocor), Millennium Pharmaceuticals (now Takeda), Novartis, Pfizer, Procter and Gamble Pharmaceuticals, Shire Pharmaceuticals, and UCB Pharma.