Approach to Presenting a Clinical Journal Club
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It can be a daunting assignment that most trainees will face at some point in their careers: Selecting, appraising, and presenting an article for a clinical journal club. Thoughts of where to begin looking for an article arise, which is often followed by apprehension about interpreting statistical tests and critically analyzing the article. Finally comes the task of presenting the article and leading a focused group discussion.

Despite the unease that can accompany these tasks, honing the skills necessary for article appraisal and succinct presentation are important. They are essential not only for an effective journal club presentation in residency and fellowship, but also for development into an astute, evidence-based clinician. Clinical journal clubs also provide an excellent opportunity to discuss new innovations in gastroenterology that shape our clinical practice. Here we present an approach (Table 1) that walks the reader through the steps necessary for preparation and successful presentation of a clinical article at journal club.

Selecting a Journal Club Article

Choosing an article is the first and, arguably, most important step. The article should be selected from a peer-reviewed, well-respected journal in gastroenterology, hepatology, or internal medicine. Examples include Gastroenterology, American Journal of Gastroenterology, Gastrointestinal Endoscopy, Clinical Gastroenterology and Hepatology, GUT, Hepatology, Journal of Hepatology, The New England Journal of Medicine, Annals of Internal Medicine, Lancet, and The Journal of the American Medical Association. Hopefully you have your favorite journals that you subscribe to and regularly read; however, for the purpose of selecting a journal article for presentation, it would be important to go through the exercise of inspecting the table of contents of some of the journals we listed. Randomized controlled trials are best, although other types of studies such as cohorts, case-control studies, and meta-analyses can occasionally be chosen. Case reports and review articles are not appropriate for this purpose and should be avoided. Although past landmark articles can be considered because they often represent the foundation of current clinical practice, we recommend choosing an article that has been published recently, preferably within the last 3–6 months, and has received attention at major GI conferences and through the lay press. This way, a “cutting-edge” topic can be presented, which your audience should hopefully already be familiar with, leading to a more productive discussion. The American College of Physicians Journal Club can be an excellent resource, as it incorporates the McMaster Online Rating of Evidence system to identify high-quality articles. In addition, at our institution, a faculty mentor is assigned to supervise each month’s journal club conference, and he or she can also help guide the trainee in choosing an appropriate article. A variety of topics can work well for a journal club, although topics that answer clinical questions or can be directly applied to practice are best. In addition, studies that reveal provocative or unexpected results, which may ultimately lead to a dramatic shift in knowledge or practice, should also be considered. Articles that address already well-described topics or address only a slight variation of a previous topic are less useful for a journal club presentation, and will likely raise the question, “Why did you pick this article?” Do not hesitate to consult with any of your attending physicians, particularly those with relevant expertise, on what they think regarding an article you selected or are thinking of selecting. You definitely do not want to select an article that has already been presented!

Appraising a Journal Club Article

After an article is selected, it must be critically appraised. At the onset, it is helpful to state why you selected your article. Although there are different approaches, we recommend critiquing articles by applying JAMA’s “User’s Guides to the Medical Literature.” These articles provide a comprehensive review of fundamental questions the reader should address. In addition, a MET Corner commentary published last year provided a nice summary on how to read the GI epidemiology literature. Key points to focus on
in the assessment of the validity of the study include randomization of patients between control and treatment group, concealment of allocation, use of intention-to-treat principle, and follow-up throughout the study.3–8 If methodologic flaws are found during appraisal of the article, this should not necessarily lead to rejection of the paper for presentation, because there is teaching value in assessing and discussing research design and methodology. Next, it is important to interpret the results as well as their magnitude and precision. Understanding basic statistics such as odds ratios and relative risks, as well as calculation of number needed to treat and/or number needed to harm can help to quantify the results.5,8 In addition, it is just as important to evaluate the clinical significance of the results and applicability to patient care; statistical significance does not necessarily indicate clinical significance. Often the first table in an article describes study participant demographics, which can help the reader to decide whether results, if clinically significant, can be applied to their own patient population. Finally, one should assess the article for bias, including funding and disclosures, which might affect the study's credibility.3 Table 2 contains a summary of key questions the reader should reflect upon and attempt to answer as he or she analytically reads an article. If an editorial accompanies the paper, it is important to read it before presentation because editorials often emphasize key points and controversial topics that, together with the reader’s own analysis, can be used to prompt discussion.

### Presenting a Journal Club Article

Despite the effort that goes into choosing and appraising an article, the work is still not done: The article needs to be presented! At our institution, we allot approximately 30 minutes for each article and recommend spending 15 minutes on presentation and 15 minutes on discussion. Topics of presentation should include background and objectives (including previous studies that lay the foundation of the article), methodology, results, conclusions, as well as appraisal of the article using the evidence-based medicine approach, as discussed (Table 2). The goal of the presentation is not to provide a detailed description of the article, because the audience should have read the article ahead of time. Rather, the presentation should focus on refreshing in the assessment of the validity of the study include randomization of patients between control and treatment group, concealment of allocation, use of intention-to-treat principle, and follow-up throughout the study.3–8 If methodologic flaws are found during appraisal of the article, this should not necessarily lead to rejection of the paper for presentation, because there is teaching value in assessing and discussing research design and methodology. Next, it is important to interpret the results as well as their magnitude and precision. Understanding basic statistics such as odds ratios and relative risks, as well as calculation of number needed to treat and/or number needed to harm can help to quantify the results.5,8 In addition, it is just as important to evaluate the clinical significance of the results and applicability to patient care; statistical significance does not necessarily indicate clinical significance. Often the first table in an article describes study participant demographics, which can help the reader to decide whether results, if clinically significant, can be applied to their own patient population. Finally, one should assess the article for bias, including funding and disclosures, which might affect the study's credibility.3 Table 2 contains a summary of key questions the reader should reflect upon and attempt to answer as he or she analytically reads an article. If an editorial accompanies the paper, it is important to read it before presentation because editorials often emphasize key points and controversial topics that, together with the reader’s own analysis, can be used to prompt discussion.

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the audience’s memory by highlighting the main points. The remainder of the journal club can be spent appraising the article with the group by discussing the strengths and weaknesses, applicability of the results to one’s patients and clinical practice, and future research that may be needed to substantiate the findings. It is always helpful to ask faculty or experts in the field to attend so that they can lend insightful comments to the discussion. Finally, always remember to rehearse the presentation on your own ahead of time to ensure a smooth delivery.

Clinical journal clubs comprise an important part of a trainee’s formal education. They provide a forum for both trainees and their peers to discuss new developments as well as landmark principles that form the basis of current practice. Just as important, they hone trainees’ analytical and presentation skills—tools that are imperative in the clinical setting. By applying the roadmap that we have laid out, one may have a more organized, focused approach to selecting, appraising, and presenting an article for a clinical journal club.

References
3. Guyatt G, Sackett D, Cook J. User’s guides to the medical literature. II. How to use an article about therapy or prevention. A. Are the results of the study valid? Evidence-Based Medicine Working Group. JAMA 1993; 270:2098–2601.
4. Guyatt G, Sackett D, Cook J. User’s guides to the medical literature. II. How to use an article about therapy or prevention. B. What were the results and will they help me in caring for my patients? Evidence-Based Medicine Working Group. JAMA 1993;271:59–63.

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