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Physician-dependent diagnosis delay in Crohn's disease: A pseudo-proposition or not?

Yan Zeng, Jun-Wen Zhang, Jian Yang

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Abstract

The challenge of diagnosis delay in inflammatory bowel disease (IBD) has emerged as a significant concern for both patients and healthcare professionals. The widely accepted notion that there is an extended time frame from the onset of symptoms to the definitive diagnosis is often attributed to the heterogeneity of IBD and the non-specificity of clinical manifestations. Specific to patients with Crohn's disease, the issue of delayed diagnosis appears to be more pronounced across different regions globally. The intricate interplay of real-world factors has led to debates regarding the primary contributors to these diagnostic delays. Drawing a comparison solely between patients and physicians and implicating the latter as the predominant influence factor may fall into a simplistic either-or logical trap that may obscure the truth. This letter, grounded in published evidence, explores areas for improvement in a forthcoming paper within the field, hoping to pinpoint the culprit behind the diagnosis delay issue for IBD patients rather than simply attributing it to so-called "physician-dependent factors". Our objective is to motivate healthcare providers and policymakers in relevant fields to reflect on strategies for addressing this problem to reduce diagnostic delays and enhance patient outcomes.

Key Words: Inflammatory bowel disease; Crohn's disease; Diagnosis delay; Influencing factors; Culprit

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Core Tip: This letter centers on the pressing matter of diagnostic delays in inflammatory bowel disease, particularly Crohn's disease. Drawing on a comprehensive evaluation of a forthcoming paper in the field, our editorial posits that addressing the current diagnostic delays in Crohn's disease hinges on recognizing the myriad complex real-world factors contributing to the issue, particularly emphasizing those behind the so-called "physician-dependent factors".

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TO THE EDITOR

The diagnostic journey for inflammatory bowel disease (IBD), particularly Crohn's disease (CD), is often fraught with delays, a reality that has significant implications for patient outcomes and healthcare delivery[1,2]. The prolonged time from symptom onset to a confirmed diagnosis is a well-documented issue in the field, with factors ranging from the disease's heterogeneity and non-specific clinical presentations to variations in healthcare systems and physician practices [3]. A forthcoming paper reporting a 10-year prospective study of delayed diagnosis in German IBD patients found that CD exhibited a more pronounced delay in diagnosis compared to ulcerative colitis (UC), highlighting the complexity of the diagnostic challenge[4]. However, the study's conclusion asserts: "Compared to patient-dependent factors, the longer diagnostic delay in CD patients compared to UC patients is physician-dependent"[4].

We analyzed previous studies on diagnosis delay in CD up to June 2024, utilizing reference citation analysis (<https://www.referencecitationanalysis.com/>), a unique artificial intelligence system for evaluating citations in biomedical literature. First, the current wording of this mentioned conclusion is prone to misinterpretation, potentially leading to the erroneous belief that the longer diagnostic delay in CD patients is mainly due to physician-related issues, which is not the whole truth or the primary truth. This oversimplification does not accurately reflect the complexity of the situation. Instead, it may inadvertently cast physicians as the primary culprits and the scapegoats for the causes of the diagnostic delay. It is widely known that IBD patients, especially CD patients, present with non-specific symptoms and significant heterogeneity, requiring the collaborative involvement of experienced gastroenterologists, endoscopists, radiologists, and pathologists[5,6]. Therefore, the diagnostic process is cautious and fraught with challenges, and cannot be achieved overnight. Although the authors have acknowledged certain limitations of the study, such as the omission of smoking habits, education level, and disease complications, the survey questionnaire used in the study to explore factors that may directly or indirectly affect the delay in the diagnosis of IBD patients still overlooks a multitude of real-world factors that are prevalent and cannot be ignored, such as the inherent complexity of CD, the heterogeneous patient-related factors, comorbidities, patient's socioeconomic status, the accessibility of medical facilities (including waiting times for colonoscopy and pathological diagnosis), the quality of medical services, and their local insurance policies and referral system regarding IBD[3,7-10]. These factors undoubtedly shape the diagnostic journey and cannot be disregarded in a comprehensive understanding of the issue.

We argue that placing undue emphasis on physicians as the primary cause of delayed diagnoses in IBD may distract from the other significant factors that necessitate intervention. Moreover, it could precipitate a rushed, low-quality, or uncompleted diagnostic process, potentially shortening the necessary differential diagnosis and trial treatments and ultimately compromising patient health and well-being[11]. Furthermore, this perspective may erode trust in healthcare providers, exacerbating the existing challenges in diagnostic delays. Therefore, this issue warrants a comprehensive and thoughtful examination.

We acknowledge the possibility that the abovementioned issues were not the authors' intention but may reflect a limitation in the study's conceptualization. The design may have inadvertently pitted patient-related factors against those attributed to physicians, an oversimplification that does not reflect the multifaceted nature of IBD diagnosis delay. It may seem intuitive to consider patient and physician factors as opposing forces (the factors contributing to the delayed diagnosis of IBD are other than patient-dependent factors, the remainder being physician-dependent factors); however, this dichotomy overlooks the intricate interplay of variables that influence diagnostic timelines. The most easily overlooked aspects are the characteristics of the disease itself and the individual variation between patients.

Second, we highlight the potential oversight in this forthcoming paper's inclusion criteria. The authors mentioned the enrollment of 513 IBD patients in a 10-year duration, with 18 subsequent exclusions for indeterminate colitis and irritable bowel syndrome (IBS), raising questions about the initial cohort's diagnostic process[4]. Were the diagnostic procedures, such as colonoscopies, pathological examinations, and necessary differential diagnosis, uniformly conducted following the diagnostic criteria at that time[12]? This crucial aspect requires clarification; otherwise, any subsequent discussion of diagnostic delays would be akin to building on quicksand. Moreover, suppose the "513 patients with IBD" mentioned by the authors in their study design were only "suspected" cases of IBD. In that case, it is noteworthy that, in addition to the indeterminate colitis and IBS mentioned by the authors, there were no other cases typically misdiagnosed as IBD in the 10-year study cohort, such as intestinal tuberculosis, Behçet's disease, and intestinal lymphoma, which seems to contradict our clinical experience and published evidence[8,13].

Furthermore, the study's methodology, characterized as a post-enrollment survey of the 513 patients with IBD, aligns more closely with a retrospective study design than the "prospective study" described in the abstract. While noted by reviewers, this distinction has not been adequately addressed or rectified, which is crucial for accurately representing the study's approach. Additionally, towards the end of the discussion section in paragraph four, the analysis of diagnostic gastroscopy referenced as Table 3 should correspond to Table 4 in the manuscript. It is puzzling that the authors included gastroscopy as a variable in their multivariate analysis; however, they failed to directly analyze the more crucial factors of colonoscopy quality and waiting times among IBD patients[14]. Furthermore, the authors' discussion regarding using gastroscopy findings to assess the accessibility of diagnostic endoscopic procedures for different patient groups appears to diverge from the core issue. A more direct approach would be to examine indicators with greater clinical significance and potential for future interventions, such as the waiting time for a colonoscopy following a doctor's medical order and the interval between acquiring pathological specimens from a colonoscopy and receiving the pathological diagnosis.

Overall, this forthcoming paper remains highly commendable, its strengths shining despite the areas where refinement is possible. As highlighted by the authors, it still holds valuable guidance and reference value for gastroenterologists worldwide. This 10-year retrospective analysis, focused on the delayed diagnosis of IBD patients in Germany, addresses a critical data gap for European and mainly German patients. The study identifies risk factors for delayed diagnosis related to patient waiting times and physician diagnosis intervals. Additionally, it underscores disparities in relative risk factors between patients with CD and UC[4].

Returning to addressing the hot issue of delayed diagnosis in IBD, a multifaceted approach is required, mainly encompassing medical regimes, human resources, and financial support. These aspects are often conflated or mistakenly attributed to "physician-dependent factors". To begin with, continuously improving medical regimes is essential. It includes revising the medical insurance system to ensure timely and comprehensive IBD diagnostics coverage. Additionally, establishing an efficient referral system for patients with suspected IBD is crucial. This system should facilitate quick and seamless transitions between primary care physicians and specialists, ensuring that patients receive prompt and appropriate care. Second, investing in human resource development is vital, which entails enhancing the education and training of general practitioners and common people in recognizing the early signs of IBD. Furthermore, forming a well-staffed, multidisciplinary IBD management team, including skilled gastroenterologists, endoscopists, and pathologists, is necessary. This team can ensure timely diagnosis and long-term management, improving overall patient outcomes. Third, adequate financial support is crucial, which includes securing funds to cover necessary patient examinations, referrals, and the maintenance of the IBD management team. Ensuring financial sustainability will help in providing consistent and high-quality care to patients. Should the necessary financial resources fail to materialize to safeguard the rights that physicians are striving to uphold, the possibility of rectifying diagnostic delays across various diseases, including IBD, stands as an unachievable goal once a strike is called[15].

Although fundamentally addressing the root causes of IBD diagnosis delays is not a task that can be achieved globally in a single step, at the very least, we can identify these deeper underlying causes and avoid attributing all issues solely to "physician-dependent factors". By considering the socioeconomic conditions and health service needs of different regions, we can take steps within our capabilities to gradually advance in the right direction towards resolving the current diagnostic delays.

CONCLUSION

In conclusion, the contention that physician-dependent factors are the relatively primary cause of the prolonged diagnostic delay in CD than UC is an oversimplification that fails to capture the intricate nature of the problem. While physicians undoubtedly play a pivotal role in the diagnostic process, the diagnostic delay in CD is shaped by a constellation of factors, encompassing the disease's intrinsic complexity, patient-specific variables, systemic limitations within healthcare, and the dynamic evolution of diagnostic criteria and technologies. A nuanced understanding of these multifaceted influences is imperative for effectively tackling the diagnostic challenges in IBD, particularly for CD, expediting the diagnostic timeline and ultimately improving patient outcomes.

FOOTNOTES

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