ARTIFICIAL INTELLIGENCE: ANECDOTES FROM A CLINICAL PHYSICIAN

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In recent years, artificial intelligence (AI) has entered the field of medicine with a mix of fascination, skepticism, and excessive expectations. For many clinicians trained in the classical paradigm of history-taking, physical examination, and inductive reasoning, AI represents both a promise and an uncomfortable challenge to traditional clinical judgment. This editorial does not aim to provide a technical or exhaustive review of the topic.

Instead, it offers a personal and anecdotal perspective from everyday clinical practice. Algorithms still stumble over the human complexity and uncertainty that characterize real medicine[1]; through four everyday scenes, I explore how AI can be integrated into medical practice not as a substitute for clinical judgment, but as a silent and useful tool, embedded in the physician's experience.

The electrocardiogram and useful silence

One ordinary afternoon in the office, while listening to a patient tell their story, I was notified by the lab of a critical result for another patient I had seen weeks earlier. I immediately requested an electrocardiogram.

A few minutes later, while still seeing the first patient, I asked the AI[2] for a preliminary interpretation of the ECG sent by the other patient.

That reading –without having to leave my desk or interrupt the interview– allowed me, once I was able to review what the AI provided, to confirm that the situation did not represent a vital emergency. It was one of those moments when AI doesn't make decisions, but helps make them possible.

Right upper quadrant pain: AI as a clinical mirror

A physician friend, living abroad, called me about work-related matters and mentioned his young daughter had severe right upper quadrant pain. He described the case and said the common causes they initially suspected had been ruled out. At that point, I consulted the AI system for less common differential diagnoses, adjusted by age and sex.

Among the AI's suggestions, aligned with my diagnostic suspicion and reinforced by details my friend shared, I integrated the idea of a gynecologic diagnosis with symptoms like those described. A few minutes later, a call from the hospital –where the young woman had been evaluated days earlier– confirmed the disease.

It wasn't AI that discovered it, but it reminded me, when the clinical context was already whispering the answer.

A patient's voice message via WhatsApp

I received a voice message from a distressed young patient who had undergone two cardiac ablations for a complex arrhythmia and had, months later, begun experiencing recurrent chest pain, general weakness, and low-grade fever. During the first episode, a physician prescribed corticosteroids, and the symptoms subsided. In the second episode, a small pericardial effusion was noted. Eventually diagnosed with pericarditis, the condition worsened to the point of requiring drainage.

In this context, I asked an AI system for a list of differential diagnoses in recurrent post-

ablation pericarditis in a young person without known autoimmune disease. The system proposed reasonable hypotheses: post-procedural, inflammatory, viral pericarditis, and some atypical immune responses. While it didn't discover anything I didn't already know, it helped me organize my thinking, prioritize tests, and avoid anchoring bias.

My clinical reflection: AI doesn't diagnose for me, but it helps me think without omission.

The critical reading that accompanies

A colleague asked for my opinion on an article he considered unserious (but lengthy), and on my first reading, I found it questionable and likely in need of more than one opinion. Instead of discarding it outright, I submitted it to the AI, guiding it with GRADE (Grading of Recommendations Assessment, Development and Evaluation)[3] criteria.

What I received was not a verdict, but a structured analysis with observations about design, quality of evidence, and potential bias.

Based on the material the AI provided, I was able to discuss the article's strengths and weaknesses with my colleague.

The final judgment was ours, but AI helped us think methodically.

Electrocardiogram interpretation in the background: Echoes of real change?

The introduction of AI tools in electrocardiogram (ECG) interpretation has been the subject of many clinical studies demonstrating their accuracy and utility in daily practice. For example, an AI-integrated ECG algorithm achieved reliable interpretation comparable to certified cardiologists, optimizing time and workflow[4].

Another model –DeepRhythmAI– showed negative predictive values above 99% for critical arrhythmias in the sample analyzed (8.5% prevalence), with 17 times fewer false negatives than human technical reviewers[5].

My clinical reflection: when I see a patient and, in parallel, AI confirms the ECG shows no emergencies, I'm using that "absence of criticality" to continue my work calmly.

It's not AI that diagnoses; it's AI that allows the clinician to focus without immediate anxiety.

Right upper quadrant pain: AI as a clinical mirror?

Faced with specific symptoms, AI can provide a list of less common differential diagnoses tailored to the context.

Regarding right upper quadrant pain, studies recommend considering biliary, hepatic, pancreatic, and renal pathologies[6].

Using AI as a tool that compiles and prioritizes diagnoses –adjusted by the patient's age and sex– supports the clinician without overriding their judgment.

My clinical reflection: AI acted like a structured mirror, not trying to "teach," but to confirm and remind.

Thinking without omitting: AI as a clinical compass in familiar terrain?

Can AI tell us something we don't already know? Probably not. But it can help ensure we don't forget what we do know. In complex clinical contexts –where diagnosis is uncertain not due to lack of data, but due to too many possible paths– AI behaves like an attentive assistant: it doesn't get distracted, it doesn't tire, it doesn't get stubborn.

In the case of the young man with recurrent pericarditis, the most likely cause was, indeed, the most likely: a post-procedural or inflammatory relapse. And yet, when consulting the AI system, clinical reasoning was reorganized: forgotten hypotheses resurfaced, tests were prioritized, the automatic repetition of previous steps was avoided. AI didn't replace judgment, but it interrupted habitual shortcuts.

This may seem minor, but it's significant. One of the most underestimated risks in medicine is not being wrong –it's thinking by inertia. If AI can interrupt that inertia– not to decide, but to make us doubt for good reason –then it has a justified role in clinical care.

Our daily practice doesn't require absolute certainties, but timely, well-posed questions. AI can help with that –not to know more, but to doubt better.

Critical appraisal: AI trained in GRADE?

Critical reading is an essential competency in evidence-based medicine. The GRADE system is now the standard for assessing the reli-

ability of evidence and the strength of recommendations.

Recent studies are exploring semi-assisted automation of GRADE using AI, producing conclusions similar to human reviewers and facilitating evidence synthesis[7,8].

My clinical reflection: when I asked AI to evaluate an article using GRADE, I received a structured analysis (risks, quality, bias) that enhanced my critical thinking. It didn't define the conclusion, but it provided tools to support it.

Critical balance and ethical considerations

While these examples show how AI can be added without replacing clinical judgment, challenges remain:

• **Trust vs. explainability:** Professionals value AI's accuracy but raise concerns about the "black box," the need for traceability, and the risk of underteaching future generations[9].

• **Real-world data variability:** AIs may be less reliable if real-world data differs from the training data. Local validation is essential[10].

• **Risks of bias and misuse:** Some initiatives use AI to challenge environmental or medical evidence for industrial interests, exacerbating bias or delaying public health regulation[11].

Final reflection

In these examples, AI neither replaces the clinical physician, solves ethical dilemmas, nor diagnoses independently. Its value lies in the effective silence with which it assists, the time it saves without imposing, and the structure it offers to critical thinking.

In an era where medicine risks fragmenting between technologists and humanists, perhaps we should reclaim these everyday, small but meaningful uses –where medical knowledge and technology work together without losing the clinical judgment that gives our practice meaning.

These anecdotes show how AI, in the examples presented, can be integrated into the practice of medicine –not as queen, nor as intruder, but as a strategic assistant. In every scenario, AI saves time, strengthens analysis, and supports decisions without replacing the human gaze.

Its responsible integration requires local validation, algorithmic transparency, and ethical oversight.

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