

ChatGPT Performances in Explanation of Physiopathology by Example

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Abstract

Physiopathology constitutes one of the basic disciplines that helps understand the mechanisms of diseases and, consequently, access effective and personalized therapies. ChatGPT is a working tool that promptly provides detailed answers to targeted questions, revolutionizing the way medical professionals interact with artificial intelligence (AI). The purpose of this study was to compare the answers provided by human intelligence with experience and professional qualification with the answers provided by ChatGPT, regarding the targeted questions addressed to one clinical case, to decipher the key pathophysiological mechanisms. The input was represented by cases published in Bulboacă et al.¹ ChatGPT-3.5 (<https://chat.openai.com/>) free version was used in our study. We provide one case (in Romanian language) and ask ChatGPT to answer five individual questions. We collected the answers on August 7, 2023. The following request was included in the ChatGPT window: We have the following case: “[case description]”. Answer the following questions: [questions]. The evaluation of the responses given by the ChatGPT was done by one researcher and classified as correct, partially correct, or incorrect. The AI generated answers were partially correct in 4 out of 5 questions and incorrect in one question. ChatGPT can be a valuable instrument for medical teaching, but answer analyses must be added to ensure the validity of the responses and explanations.

Keywords: ChatGPT; Medical cases; Physiopathology

References

1. Bulboacă AE, et al. Fiziopatologie aplicată. Ed. Risoprint, Cluj-Napoca, 2023.

