

POSSIBILITY OF USING ARTIFICIAL INTELLIGENCE CHATGPT (GENERATIVE PRE-TRAINING TRANSFORMER) IN RESOLVING CLINICAL CASES OF PATIENTS WITH COMMUNITY-ACQUIRED PNEUMONIA

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ChatGPT (Generative Pre-training Transformer) can potentially be used to help doctors to make a diagnosis and prescribe treatment for a variety of diseases.

The purpose of the study: to establish the effectiveness of using ChatGPT as a means of supporting clinical decision-making in patients with community-acquired pneumonia (CAP).

Materials and methods. 30 clinical cases of CAP were presented for ChatGPT (version 3.5) in the form of a text document containing information about the patient's complaints, disease and life history, objective examination, data of laboratory and instrumental investigations. The ChatGPT was asked questions about the diagnosis, CRB-65 score to assess the severity of CAP, treatment, and general recommendations for patient management.

Results. ChatGPT showed an encouraging result in the established diagnosis of CAP, because 96.7 % of the diagnoses turned out to be nosologically correct. Determining severity of CAP and prognosis according to the CRB-65 scale was wrong in 40 % of cases. The compliance of the proposed ChatGPT treatment with the clinical protocol for CAP was 66.7 %, and the general recommendations for patient management were 80.0 %.

Conclusions. ChatGPT as a means for supporting clinical decision-making needs software improvement and require the involvement of medical professionals and clinical trials to generate clinical evidence.

Key words: artificial intelligence, ChatGPT, community-acquired pneumonia, effectiveness of diagnosis and treatment.

Ukr. Pulmonol. J. 2024;32(4):32–36.

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