

1. Hemodynamic Optimization: Rapid fluid resuscitation protocols showed superior outcomes Goal-directed fluid therapy reduced complications by 25% Early vasopressor support, when indicated, improved surgical conditions

2. Preoperative Risk Assessment: modified rapid assessment protocols demonstrated 90% accuracy integration of point-of-care testing reduced preparation time by 35% standardized risk stratification improved outcome prediction

3. Technical Preparation: modified trocar placement strategies for emergency cases reduced complications flexible positioning protocols improved surgical access standardized equipment sets increased procedural efficiency

4. Team Coordination: implementation of emergency-specific checklists reduced delays cross-disciplinary communication protocols improved outcomes standardized handover procedures enhanced safety

Conclusion. 1. Emergency laparoscopic surgery requires distinct preparation protocols from elective procedures 2. Rapid but comprehensive assessment protocols are essential for optimal outcomes 3. Standardized preparation algorithms should remain flexible for individual patient needs 4. Team coordination and communication are crucial success factors 5. Integration of modern imaging and monitoring techniques significantly improves preparation quality

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THE GROWING ROLE OF ARTIFICIAL INTELLIGENCE IN CLINICAL PRACTICE

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Relevance. The application areas of artificial intelligence (AI) are currently very wide. AI is used in government, military, education, forensics, the judicial system, sports and many other areas. The implementation of AI systems in medicine is one of the most important modern trends in global healthcare. AI technologies are fundamentally changing the global health system, allowing a dramatic redesign of the medical diagnostic system, the development of new medicines, as well as an overall improvement in the quality of health services while reducing costs for medical clinics [1, 2, 3].

The aim: to analyze the use of AI in clinical practice with a comprehensive review of relevant indexed literature.

Research methods. The electronic database PubMed/Medline was used to search for information. The search data covers the period from 1964 to 2024.

Results. During the above research period, 94468 scientific publications were identified, 83.8% of which (79216) were published in the last ten-year period (Table).

Table. Number of publications in the last ten-year period.

Years	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Number of publications	1757	1874	2453	3631	5872	8800	12320	14351	16427	22397
Percentage increase to 2015	—	+ 7	+40	+107.	+234	+401	+601	+716	+835	+1275

The data presented in the table convincingly reflect the growing role of AI in clinical practice. It is enough to emphasize that the number of publications on the research topic in 2024 was almost 13 times greater than in 2015.

The thematic focus of the identified publications on the research topic is very broad and covers almost all areas of clinical medicine [4].

Conclusion. The use of AI in medicine can improve the quality of life of patients, increase the effectiveness of treatment, optimize the costs of medical services and reduce the number of errors made by medical personnel.

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