Bibliometric Analysis on Robotics in Plastic and Reconstructive Surgery

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Abstract:

Background: The use of robotics in plastic surgery is a developing area that utilizes advanced robotic systems to improve the accuracy, adaptability, and supervision during intricate surgical procedures. These technologies offer advantages including decreased complications, quicker recovery periods, and better results for patients. Our goal was to conduct a bibliometric analysis in order to thoroughly examine the top 100 most-cited literature on robotics in plastic surgery, in order to assess patterns and deficiencies in the field.

Methods: On 9th November 2024, the top 100 most cited articles on robotics in plastic and reconstructive surgery were identified using Web of Science database, covering journal publications from 2010 to 2024. Data such as citation count, primary subject, and outcome measures were collected and organized from each article. Additionally, the levels of evidence (LOE) for each study were evaluated.

Results: We identified the top 100 cited publications in the field of robotics in plastic surgery. The number of citations per publication varied, with an average of 19. The study with the highest number of citations was authored by Van Mulken T, et al, with 88 citations. The majority of publications were categorized as LOE 5, which consisted of case reports, expert opinion, personal observations, and