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Robotics and AI-assisted plastic surgery.

Artificial Intelligence is a topic that has created a divide in the medical community. Some medical professionals believe AI will greatly improve healthcare, while others worry about safety, accuracy, and loss of human control. In plastic surgery, AI and robotic technology are becoming more common and are changing the way procedures are planned and performed.

One major use of AI in plastic surgery is surgical planning. AI software can analyze patient photos, medical history, and facial or body structure. This allows surgeons to predict how a patient may look after surgery. These predictions help patients understand possible outcomes before deciding to move forward. This technology is used to make the patient confident about the outcome of the surgery and improve communication between the surgeon and the patient.

Another benefit of AI in plastic surgery is personalization. Every patient has a unique body and set of goals. AI allows surgeons to customize procedures based on individual anatomy rather than using a one size fits all approach. This personalization can improve both functional and cosmetic outcomes, leading to higher patient satisfaction.

Despite these advantages, there are concerns surrounding AI assisted plastic surgery. Some critics worry that overreliance on technology could reduce a surgeon's skill or judgment, and end up 'taking their job.' Others raise ethical concerns about data privacy, especially when patient images and medical records are used by AI systems. There is also concern about unequal access to advanced technology, as these procedures may be expensive and not available to all patients.

Looking toward the future, AI and robotics are expected to play an even larger role in plastic surgery. Continued research and testing will be necessary to ensure safety and effectiveness. If used responsibly, AI has the potential to enhance surgical precision, improve patient outcomes, and support surgeons without replacing the human element that is essential in medicine.

Work Cited

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