# 수술 중 빅데이터의 인공지능 분석

**이 형 철**
서울의대 마취통증의학과

# A.I analysis in intraoperative big data

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A noteworthy change in recent medical research is the rapid increase of research using big data obtained from electrical medical records (EMR), automated anesthesia record, and picture archiving and communication systems (PACS). Research using big data is often difficult to apply traditional statistical techniques because of the vastness of the data and complexity of the relationship. Therefore, application of artificial intelligence (AI) techniques which can handle such problem is becoming popular. The deep learning techniques, such as multi-layer perceptron, convolutional neural network, and recurrent neural network have been spotlighted by the success of deep convolutional neural network in solving various problems that are difficult to solve by conventional methods. In addition, the gradient boosting machine has been applied to many problems in the medical field and has shown better results than the logistic regression. The performance of recent artificial intelligence algorithms has surpassed human experts in many fields. In this presentation, we will discuss artificial intelligence techniques that can be applied in the field of medicine, and will discuss tips for developing and applying machine learning algorithms to our clinical practice.

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