AI and Simulation in Clinical Practice: a Look at the Future

Dr Abdullah Albeyatti MBBS BSc MRCS (ENT)
CEO and Co-Founder of Medicalchain
• What is AI (artificial intelligence)

• What are we trying to achieve with it?

• How has it been used already?

• How could it be potentially used?
What is AI
What is AI

• The ability for the machine to digest, process and an execute a decision based on the information it is fed.

• The machine has to learn by experience, analyze thousands of examples to build an algorithm and tweak this based on achieving its objectives. Overtime, the machine will become smarter.
What are we trying to achieve?

- To have machines take over routine processes from humans.
- In medical terms, already being used in ophthalmology and radiology
- Predicting vs Detecting
The IDx-DR is designed to analyze retinal photos captured by the Topcon NW400 camera and detect “more than mild” diabetic retinopathy in adults who have diabetes.
Large Vessel Occlusion detection

• Using artificial intelligence to automatically identify and triage suspected LVO strokes using Viz.ai technology

• Clinician notified when suspected LVO stroke has been detected in order to mobilize the stroke team
Artificial Intelligence for Surgery

12. Initial Staple Line

**TIPS**

- Stomach on a neutral position, staple line reinforcement
- Check free passage of OGT after each staple line
- Check crotch line

Sleeve Gastrectomy

Dr. Jane Doe

9. Angle of His and lateral fundus dissection

- Entry lesser sac and/or stomach mobilization

10. Proximal Greater Curve dissection

Ligature (x) Automatic Grasper (x)
It sounds to me like atrial fibrillation, the heart beats irregularly and faster than normal.