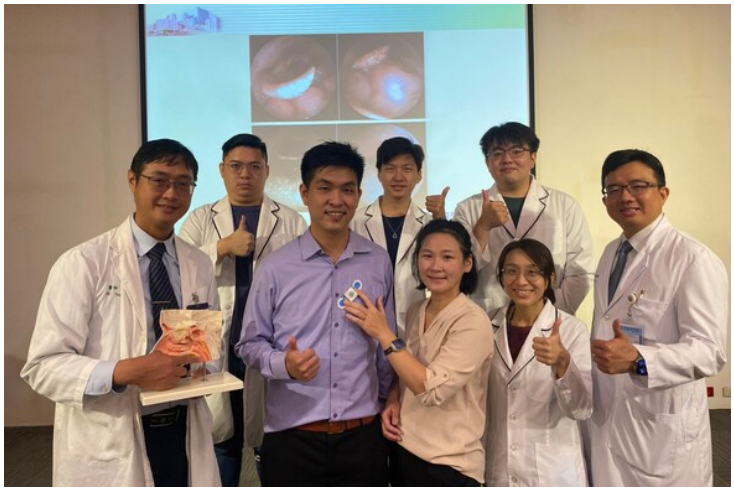
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Researchers in Taiwan develop tool to accurately detect obstructive sleep apnea syndrome

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It demonstrates 95.8% accuracy for defining severe OSAS



Snoring can be an alarming sign of obstructive sleep apnea syndrome (OSAS). Studies showed that 50% of individuals who snore may experience sleep apnea, which can lead to life-threatening conditions such as heart disease, hypertension, intracerebral hemorrhage, stroke, and even sudden death during night-time in severe cases.

Sleep Medicine Center at China Medical University Hospital (CMUH, Taiwan) has introduced iDREAM (Intelligent Detection of Respiratory Events through Automated Monitoring), incorporating Quanta's QOCA Portable ECG Monitoring Device, as a simple solution to efficiently detect symptoms of apnea patients during their sleep at home.

More than 100 patients have been in clinical trials of iDREAM. With this AI-powered ECG analysis, CMUH's physicians are able to identify obstructive sleep apnea syndrome (OSAS) more accurately and to reduce the time spent for diagnosis and treatment.

iDREAM , the home-based sleep detection system, detects ECG change from OSAS episodes and determines severity using its deep learning methodology. It demonstrates 92.7% and 93.2% accuracy for sleep apnea and wake-up events (interruption of sleep from apnea), and 95.8% accuracy for defining severe OSAS (30 episodes per hour).

iDREAM is still undergoing clinical testing but plans are in place to file for Taiwan Food and Drug Administration smart medical device certification and then formal introduce it into clinical practice. It is expected to be impactful in sleep medicine.