

本集内容

Wearable tech aids stroke patients 可穿戴“电子皮肤”助中风病人康复

学习要点

有关“health 健康”的词汇

边看边答

What was the challenge for the scientists when creating the device which monitors the patient's recovery?

文字稿

Technology you can wear. Skin displays developed by Japanese researchers that show your **vital signs**. It's to put on patients, so that doctors can **monitor their progress**.

The displays are among a new wave of wearable electronics finding medical applications.

In the US, Lizzy McAninch had a stroke two years ago. She couldn't move or speak or swallow for several weeks. Lizzy is testing out wearable sensors that might **speed her recovery**.

They send information wirelessly to the **medical team**. The doctors here can continuously monitor Lizzy, wherever she goes using these devices. They can follow her muscle activity, her **heart rate**, even her speech - track whether she's showing signs of improvement.

Kristen Hohl, Physiotherapist

Do we see that they're walking more at home or do we see that they're engaging in conversations? Those are the types of things I can get feedback from the sensors, where currently I only have their report.

The challenge for the scientists was to pack a lot of electronics into a small flexible material.

Professor John Rogers, Northwestern University (Chicago, US)

It's almost mechanically sort of imperceptible to the patient who's wearing the device. And you can embed all sorts of advanced sensor functionality, microprocessor, computing capability, radios, power supplies, into this kind of very unusual platform, and that's the uniqueness of what we do.

By the end of this year, the team will have more information than anyone has ever had before about recovery from stroke. They believe that their study could transform the way patients are treated in the future.

可以穿在身上的技术。由日本研究者们开发的“电子皮肤”可以显示你的**生命体征**。这种技术给病人佩戴后，可以帮助医生**监测他们的体况**。

这项智能显示技术与其它众多可佩戴电子产品掀起了可佩戴技术寻找医学用途的新风潮。

在美国，利齐·麦卡宁奇两年前患了中风。她曾有数周不能动，不能说话，也不能吞咽。利齐正在测试这种可能**加快她的康复**的可穿戴传感器。

这些传感器把收集到的信息通过无线传输发送给**医护人员**。医生可以不间断地对利齐进行监测，不论她走到哪里，只要她戴着这个设备。医生可以追踪监测她的肌肉活动性，她的**心率**，甚至她的说话能力，从而跟进判断她是否有好转的迹象。

克里斯汀·霍尔 理疗医师

“我们能看到他们在家中行走的更多，或看到他们参与到各种对话中了吗？这就是我可以从传感器得到的信息，而目前我只有他们的报告。”

对于科学家们的挑战则是把大量的电子设备聚集放入一种轻薄灵活的材料中去。

约翰·罗杰斯教授 西北大学（美国芝加哥）

“这个东西对于穿戴它的病人来说是几乎难以察觉的。而且你还可以将多种先进的传感器的功能，微处理器，计算能力，无线电收发设备和电源嵌入这个不寻常的技术平台中，这也正是我们做的独一无二的地方。”

到今年年底，这组开发人员将收集到比以往任何时候都多的关于中风康复的数据。他们相信这个研究将彻底改变未来病人接受治疗的方式。

词汇

vital signs

生命迹象，生命体征

monitor (their) progress

监测（他们的）体况

speed (her) recovery

加快（她的）康复

medical team

医疗小组，医护人员

heart rate

心率

视频链接：<http://bbc.in/2EZvUdv>

你知道吗?

The best way to help prevent a stroke is to eat a healthy diet, exercise regularly, and avoid smoking and drinking too much alcohol, according to the UK National Health Service.

英国国家医疗服务体系说，预防中风最好的方式是健康饮食，定期锻炼，不吸烟和不过量饮酒。

问题答案

The challenge was to pack a lot of electronics into a small flexible material.