
科学家们发现，病毒会形成一种捉弄人的“隐性球体”以导致我们生病。英国国家卫生研究所（**National Institutes of Health**）的团队称，他们的发现将改写教科书中有关感染的内容。

We normally think of viruses as '**lone wolves**', each **waging** a solo campaign of infection. But inside the **stool samples** of patients with either norovirus or rotavirus, scientists discovered something new. Up to 40 viruses were gathering together and wrapping themselves up in a **sphere** of fat.

我们通常认为病毒是“独行侠”，每个病毒都各自组织感染人体的活动。但在诺如病毒或轮状病毒携带者的粪便样本中，科学家们发现了一种新的形态。有将近四十个病毒聚集在一起，把自己包在一个脂肪球里。

Experiments, published in the journal *Cell Host and Microbe*, showed the spheres gave the viruses huge advantages. They acted like an **invisibility cloak** that hid the viruses from the **immune system**, protected them from harsh environments including **stomach acid**, and helped them overwhelm their target cells in the **intestines**. Norovirus infections started by these spheres were more severe and lasted longer than those caused by lone viruses.

发表在《细胞·宿主与微生物》期刊上的一系列实验结果显示，该球状体给病毒带来了很大的优势。它们就像一项隐形斗篷，让免疫系统无从发觉被藏起来的病毒，保护它们不受包括胃酸等恶劣环境的影响，还帮它们击败肠道内的靶细胞。由这类球状体引起的诺如病毒感染比个体病毒导致的感染更严重，持续时间更长。

Rotavirus is the biggest cause of **diarrhoea** in children and norovirus is so infectious it spreads **rampantly** through schools, **care homes** and cruise ships.

轮状病毒是导致儿童腹泻的最大原因，而诺如病毒传染性极强，它在学校、看护中心里和大型游轮上猖獗地蔓延开来。

There are no drugs that treat these infections. The researchers hope their study could lead to new ways of **tackling** these common diseases.

目前还没有能治愈这类感染病的药物。研究人员希望他们的研究可以为对抗这类常见病开辟新途径。

1. 词汇表

lone wolves	“独行侠”，喜欢单独行动的人
waging	发起、组织（活动）
stool samples	粪便样本
sphere	球状体
invisibility cloak	隐形斗篷
immune system	免疫系统
stomach acid	胃酸
intestines	肠、肠道
diarrhoea	腹泻

rampantly	猖獗地、肆虐地
care homes	看护中心
tackling	对付、对抗

2. 阅读理解：请在读完上文后，回答下列问题。（答案见下页）

1. How many viruses have been found to join together in a 'sphere of fat'?
2. True or false? *This 'sphere of fat' meant the immune system could not see the viruses.*
3. What are the effects of infections caused by these 'spheres', compared to a lone virus?
4. Which drugs can be used to stop infections like norovirus and rotavirus?

3. 答案

1. How many viruses have been found to join together in a 'sphere of fat'?

Up to 40 viruses were discovered gathering together and wrapping themselves up in a sphere of fat.

2. True or false? *This 'sphere of fat' meant the immune system could not see the viruses.*

True. The 'sphere of fat' acted like an invisibility cloak that hid the viruses from the immune system – so they couldn't be seen.

3. What are the effects of infections caused by these 'spheres', compared to a lone virus?

Norovirus infections started by these spheres were found to be more severe and lasted longer than those caused by lone viruses.

4. Which drugs can be used to stop infections like norovirus and rotavirus?

There are no drugs that treat these infections but researchers hope their study could lead to new ways of tackling these common diseases.