

## ProMED情報(詳細)



記事番号	20050824-0080
重要度	Er
タイトル	PROHuman bocavirus, a new pathogen of childhood
感染症名	
主症状	
日付	2005/08/23
流行国	
和訳概要	<p>human bocavirus、新種の小児の病原体#</p> <p>[1]情報源: Reuters Health、8月22日。 スウェーデンの研究グループは8月22日、これまで知られていなかった小児の重症呼吸器感染の原因である可能性が高いウイルスを同定したと発表した。同グループは、発見したウイルスをHuman bocavirusと命名し、同研究グループが呼吸器感染の原因となる全ウイルスの体系的な研究を開始したことを示唆した。今週号の米国科学アカデミー紀要誌に発表された今回の研究報告は、医師が大部分の呼吸器感染の原因についていかに知識がないかを強調している。</p> <p>カリフォルニアの別の研究チームは、患者に感染しているウイルスの約40%しか同定できないことを確認し、両研究チームはウイルスの迅速診断は、呼吸器疾患の診断と治療に有用であると指摘した。</p> <p>小児病院に入院した小児540人からの検体において、新種bocavirusウイルスは患者17名の病因であったことをスウェーデンの研究グループは確認した。「書下気道感染により入院した小児群で、最も重要なウイルスはrespiratory syncytial virus (RSV)である。その他に重要な病原体は、インフルエンザウイルス、パラインフルエンザウイルス、アデノウイルス、ライノウイルス、コロナウイルスおよびヒトメタニューモウイルスである。」、「しかし、こうした重症感染の12%~39%の原因が同定されていない。」としている。</p> <p>2番目の研究では、カリフォルニア州保健局のJanice Louie博士、カリフォルニア大学サンフランシスコ校Lawrence Drew博士とその共同研究者らが、「原因が特定されない上気道感染」、急性気管支炎、副鼻腔炎、および肺炎を含むインフルエンザ様感染症で病院に報告された患者を検討した。同グループは、全体の39%に当たる患者103名でしか病因ウイルスを検出できなかった。その内訳は、インフルエンザA/Bウイルスが54名で、ピコルナウイルスが28名で、RSVが12名で、ヒトメタニューモウイルスが4名でヒトコロナウイルスOC43が2名で確認された。</p> <p>[2]情報源: Reuters Health、8月22日。 8月22日に公表された研究報告よれば、暫定的にhuman bocavirusと命名された新種のヒトのウイルスが、小児患者の気道分泌物中に確認された。新型ウイルスはウシとイヌに感染するBocavirus科に属する2種類の関連するウイルスに類似している。</p> <p>以下、研究を指導したストックホルムにあるカロリンスカ大学病院のDr. Tobias Allanderのコメントと[1]にも記述された今回の研究での新知見。</p>

## 情報詳細【和文】

human bocavirus、新種の小児の病原体#

[1]情報源: Reuters Health、8月22日。

スウェーデンの研究グループは8月22日、これまで知られていなかった小児の重症呼吸器感染の原因である可能性が高いウイルスを同定したと発表した。同グループは、発見したウイルスをHuman bocavirusと命名し、同研究グループが呼吸器感染の原因となる全ウイルスの体系的な研究を開始したことを示唆した。今週号の米国科学アカデミー紀要誌に発表された今回の研究報告は、医師が大部分の呼吸器感染の原因についていかに知識がないかを強調している。

カリフォルニアの別の研究チームは、患者に感染しているウイルスの約40%しか同定できないことを確認し、両研究チームはウイルスの迅速診断は、呼吸器疾患の診断と治療に有用であると指摘した。小児病院に入院した小児540人からの検体において、新種bocavirusウイルスは患者17名の病因であったことをスウェーデンの研究グループは確認した。「書下気道感染により入院した小児群で、最も重要なウイルスはrespiratory syncytial virus (RSV)である。その他に重要な病原体は、インフルエンザウイルス、パラインフルエンザウイルス、アデノウイルス、ライノウイルス、コロナウイルスおよびヒトメタニューモウイルスである。」「しかし、こうした重症感染の12%~39%の原因が同定されていない。」としている。

2番目の研究では、カリフォルニア州保健局のJanice Louie博士、カリフォルニア大学サンフランシスコ校Lawrence Drew博士とその共同研究者らが、「原因が特定されない上気道感染」、急性気管支炎、副鼻腔炎、および肺炎を含むインフルエンザ様感染症で病院に報告された患者を検討した。同グループは、全体の39%に当たる患者103名でしか病因ウイルスを検出できなかった。その内訳は、インフルエンザA/Bウイルスが54名で、ピコルナウイルスが28名で、RSVが12名で、ヒトメタニューモウイルスが4名でヒトコロナウイルスOC43が2名で確認された。

[2]情報源: Reuters Health、8月22日。

8月22日に公表された研究報告よれば、暫定的にhuman bocavirusと命名された新種のヒトのウイルスが、小児患者の気道分泌物中に確認された。新型ウイルスはウシとイヌに感染するBocavirus科に属する2種類の関連するウイルスに類似している。

以下、研究を指導したストックホルムにあるカロリンスカ大学病院のDr. Tobias Allanderのコメントと[1]にも記述された今回の研究での新知見。

## 情報詳細【英文】

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HUMAN BOCAVIRUS, A NEW PATHOGEN OF CHILDHOOD

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[1]

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From: ProMED-mail <[promed@promedmail.org](mailto:promed@promedmail.org)>

Source: Reuters Health, Mon 22 Aug 2005 [edited]

<<http://www.alertnet.org/thenews/newsdesk/N22384164.htm>>

Swedish researchers said on Monday [22 Aug 2005] that they had identified a previously unknown virus which may cause many cases of serious respiratory infections in children. They named the virus Human bocavirus and suggested the researchers start a systematic search for all the viruses that cause respiratory infections. The report, published in this week's issue of the Proceedings of the National Academy of Sciences, underlines how little doctors know about the sources of most respiratory infections.

A separate team of California researchers found they could identify only about 40 percent of viruses infecting patients, and both teams said rapid testing for viruses would be useful in diagnosing and treating respiratory illnesses. Health experts say this step was particularly important because there are fears that influenza, in particular avian influenza, could cause a global pandemic. Being able to test quickly to find out what is making someone sick can mean the difference between life and death, because antiviral medications must be given early on to prevent serious illness in the case of influenza.

In their sample of 540 children in a pediatric hospital ward, the new bocavirus was responsible for 17 of the cases, the Swedish researchers found. "Lower respiratory tract infection is a leading cause for hospitalization of infants and young children and accounts for 250 000 hospitalizations a year in the United States alone," Tobias Allander of the Karolinska Institute in Stockholm and colleagues wrote in their report. "The most important viral agent in this group of patients is respiratory syncytial virus (RSV). Other important agents are influenza viruses, parainfluenza viruses, adenoviruses, rhinoviruses, coronaviruses, and human metapneumovirus." But the causes of between 12 percent and 39 percent of these serious infections are never identified," the researchers said.

In a 2nd study, Janice Louie of the California Department of Health Services, Lawrence Drew of the University of California, San Francisco and colleagues checked patients reporting to the hospital with flu-like illness including "unspecified upper respiratory infection," acute bronchitis, sinus infections, and pneumonia. They could identify a virus in only 103, or 39 percent, of the patients. These included influenza A or B in 54 patients, picornavirus in 28, RSV in 12, human metapneumovirus in four and human coronavirus OC43 in 2 patients.

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[2]

Date: Tue 23 Aug 2005

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Source: Reuters Health, Mon 22 Aug 2005 [edited]

<<http://www.reutershealth.com/en/index.html>>

A new human virus, provisionally named human bocavirus, has been identified in the respiratory secretions of children, according to a report released Monday. "Our approach and methodology are similar to [those] of the human genome project," Dr. Tobias Allander from Karolinska University Hospital, Stockholm, told Reuters Health. "Our finding of a rather prevalent previously unknown pathogen suggests that the screening is worth pursuing in a larger scale."

The new virus is similar to 2 related members of the Bocavirus family that infect cattle and dogs, report Allander and colleagues. Consequently, they propose the name "human bocavirus (HBoV)" for the new virus, writing in the research journal PNAS Early Edition. The virus was first spotted in 2 specimens from Asian patients.

In a later series of screenings, 17 of 540 nasal samples proved to be positive for HBoV, the researchers found, and in 14 cases it was the only virus detected. All 14 children with HBoV for whom records were available had respiratory illness for 1-4 days prior to hospital admission. None of the HBoV-infected children had gastrointestinal symptoms, conjunctivitis or rash, the authors say.

"We will of course perform additional studies on human bocavirus," Allander said. "However, in order to sort out the epidemiology, disease association, and other aspects of this infection, multiple studies from all around the world will likely be more important."

To identify other viruses, Allander explained, "we are working on a number of sample collections in collaboration with clinicians. However, we believe that the most fruitful future approach will be a broad and unbiased exploration of the viruses that infect humans, a 'human virome' project. We think such a collaborative project should be seriously discussed." There are many diseases with no known cause, "and some of them have similarities to virus infections," he concluded. "Therefore, virus discovery is an urgent scientific task."

[Byline: Will Boggs, MD]

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[At the time of posting this report, Dr Allander and colleagues' publication has appeared in neither the current issue of PNAS nor the 22 Aug 2005 Early Edition, so comment is reserved. ProMED-mail acknowledges receipt of the same reports from George Robertson and Mary Marshall. - Mod.CP]

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## **New childhood virus tied to respiratory infections**

22 Aug 2005 21:25:50 GMT

Source: Reuters

WASHINGTON, Aug 22 (Reuters) - Swedish researchers said on Monday they had identified a previously unknown virus that may cause many cases of serious respiratory infections in children.

They named the virus human bocavirus and suggested the researchers start a systematic search for all the viruses that cause respiratory infections.

The report, published in this week's issue of the Proceedings of the National Academy of Sciences, underlines how little doctors know about the sources of most respiratory infections.

A separate team of California researchers found they could only identify about 40 percent of viruses infecting patients, and both teams said rapid testing for viruses would be useful in diagnosing and treating respiratory illnesses.

Health experts say this step was particularly important because there are fears that influenza, in particular avian influenza, could cause a global pandemic.

Being able to test quickly to find out what is making someone sick can mean the difference between life and death because antiviral medications must be given early on to prevent serious illness in the case of influenza.

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But the causes of between 12 percent and 39 percent of these serious infections are never identified, the researchers said.

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## Scientists Identify New Respiratory Virus

JRL of this page: [http://www.nlm.nih.gov/medlineplus/news/fullstory\\_26465.html](http://www.nlm.nih.gov/medlineplus/news/fullstory_26465.html) (\*this news item will not be available after 09/21/2005)

**REUTERS**  
HEALTH INFORMATION

By Will Boggs, MD

Monday, August 22, 2005

NEW YORK (Reuters Health) - A new human virus, provisionally named human bocavirus, has been identified in the respiratory secretions of children, according to a report released Monday.

"Our approach and methodology are similar to that of the human genome project," Dr. Tobias Allander from Karolinska University Hospital, Stockholm, told Reuters Health. "Our finding of a rather prevalent previously unknown pathogen suggests that the screening is worth pursuing in a larger scale."

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SOURCE: PNAS Early Edition, August 22, 2005.

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