Antibiotic-Resistant Klebsiella pneumoniae and Colistin-resistant E. coli and Staphylococcus aureus

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World Health Organization experts made a recent assessment concerning resistance to antibiotic drugs among these countries, now more than ever, because of antibiotic-resistant germs.

The experts, at an international meeting in Haiti, reported that E. coli and Staphylococcus aureus are resistant to carbapenems, antibiotics that are highly prescribed in the Caribbean.

Resistance is not limited to drugs of last resort, but even to low dose, inexpensive antibiotics such as ketorolac in developing countries. The findings were recently reported at an international health meeting in Haiti.

Now, the experts are calling for a collaborative effort with the private sector in developing countries to improve quality and affordability, to contain hospitalization costs and cut infection spread.

What are Klebsiella pneumoniae and Colistin resistance?

Klebsiella pneumoniae infection is considered the disease of hospitals and is a risk factor for a higher risk of hospitalization and death.

Colistin antibiotics are used to treat resistant bacteria such as Klebsiella pneumoniae in hospitals.

Are Klebsiella bacteria developing resistance to Colistin?

According to a paper published in Nature Medicine in 2010, the most commonly resistant population of Klebsiella pneumoniae identified is in Haiti and Jamaica.

The media often wrote about the report as more than 12% Klebsiella pneumoniae bacteria showed antibiotic resistance. In an article published in June 2011 by the Washington Post, the CDC reported that resistance to Colistin was increasing in certain Caribbean countries.

With such alarming statistics, it is also necessary to define terms and refer to the bacterial gene known as Klebsiella pneumoniae lung-associated isolate.

Klebsiella lung-associated isolate is a study in cellular biology that reports pathological infection of the lungs of infected lung-associated isolates. Klebsiella pneumoniae lung-associated isolate is an excellent study tool in developing countries since it reports the mutation, or gene change, of the Kla lung-associated isolate.

What is colistin resistance?

Colistin is used to treat a wide range of infections in the nose, throat, lung, blood and bones. Under acute treatment for severe infections, it can prevent severe fevers and high fevers.

Colistin is also an effective drug in cancers and end-stage cases of advanced disease.

A drug of last resort for treating resistant infections of the lungs and/or urinary system.

Klebsiella pneumoniae resistant bacteria, colistin-resistant E. coli and Colistin-resistant Staphylococcus aureus

The anti-microbial impact of chronic antibiotic resistance, especially among key populations, is widespread and crosses all geographic boundaries, resulting in drug-resistant communicable diseases that negatively impact patient care, public health and development.

The cases of developing resistance from bacterial pathogens, including Klebsiella pneumoniae, colistin-resistant E. coli and bacteria with colistin resistance, are often resistant to the most potent drugs currently available for the treatment of these bacterial infections.

For example, according to the CDC:

Some bacteria, including Klebsiella pneumoniae and colistin-resistant E. coli, have developed resistance to both Colistin and Versalis colistin (sold by companies to treat pneumoniae), indicating that some pathogenic bacteria have developed mechanisms to develop resistance to colistin resistance.

However, colistin is a treatment of last resort for Klebsiella pneumoniae and Colistin is not effective against Klebsiella or Colistin-resistant E. coli in the acute setting.

Klebsiella pneumoniae bacteria causing symptoms in Haiti:

According to an article published in the Journal of Medical Microbiology:

E. coli resistant to colistin made the headline. It was a communicable disease that caused acute pneumonia and is currently common in Haiti. It has been described to be a respiratory disease that causes pneumonia-like symptoms associated with coughs and chest pain, in addition to swelling of the mouth, neck and throat. The cases reported have been severe and have shown milder symptoms to its neighbor, the Klebsiella pneumoniae bacteria.

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