PNEUMONIA

Pneumonia is an inflammatory condition of the lung affecting primarily the microscopic air sacs known as alveoli. It is usually caused by infection with viruses or bacteria.

Typical symptoms include cough, chest pain, fever, and difficulty breathing. Diagnostic tools include X-rays and culture of the sputum. Vaccines to prevent certain types of pneumonia are available. Treatment depends on the underlying cause. Bacterial pneumonia is treated with antibiotics. If pneumonia is severe, the affected person is admitted to hospital.

Pneumonia affects approximately 450 million people globally per year, seven percent of the population, and results in about 4 million deaths, mostly in developing countries. The development of antibiotic therapy and vaccines in the 20th century has seen improvements in survival. Nevertheless, in developing countries, and among the very old, the very young and the chronically ill pneumonia remains a leading cause of death.

People with infectious pneumonia often have a productive cough, fever accompanied by shaking chills, shortness of breath, sharp chest pain during deep breaths, and an increased respiratory rate. In the elderly, confusion may be the most prominent sign. The typical signs and symptoms in children under five are fever, cough, and fast or difficult breathing.

Pneumonia is due to infections caused primarily by bacteria or viruses and less commonly by fungi and parasites. Although there are more than 100 strains of infectious agents identified, only a few are responsible for the majority of the cases. Mixed infections with both viruses and bacteria may occur in up to 45% of infections in children and 15% of infections in adults. A causative agent may not be isolated in approximately half of cases despite careful testing.

Oral antibiotics, rest, simple analgesics, and fluids are usually used for complete resolution. However, those with other medical conditions, the elderly, or those with significant trouble breathing may require more advanced care. If the symptoms worsen, pneumonia does not improve with home treatment, or complications occur, hospitalization may be required. Worldwide, approximately 7-13% of cases in children result in hospitalization, whereas in the developed world between 22 and 42% of adults with community-acquired pneumonia are admitted.

The pneumonia severity index, or the CURB-65 score, is used for determining the need for admission in adults. This index includes the following markers:

Confusion
Urea in blood
Respiration rate
Blood pressure
Age 65+ is also considered to be a risk factor.

The CURB-65 severity score is useful for determining the need for admission in adults. If the score is 0 or 1, people can typically be managed at home; if it is 2, a short hospital stay or close follow-up is needed; if it is 3-5, hospitalization is recommended.

Pneumonia

I. Give English equivalents:
1) воспалительное заболевание, состояние, процесс;
2) поражать альвеолы;
3) тяжелое заболевание;
4) вакцины, вакцинация, антибиотики;
5) развитые и развивающиеся страны;
6) хронические больные;
7) молодые / пожилые;
8) сопровождаться чем-либо (кашель сопровождается одышкой);
9) наиболее выраженный признак;
10) возникать (могут возникать осложнения, смешанные инфекции);
11) большинство случаев;
12) выделить возбудителя;
13) анальгетики;
14) приводить к госпитализации (летальному исходу);
15) пристальное наблюдение

II. Answer the following questions:
1) What is pneumonia caused by?
2) How is it diagnosed?
3) How many people does it globally affect per year?
4) What contributed to better survival of patients with pneumonia in the 20th century?
5) What are the main symptoms?
6) What is the proportion of mixed infections in adults?
7) In what categories of the population do mixed infections occur more frequently?
8) Are causative agents always isolated?
9) In what cases is hospitalization required?
10) What markers does the pneumonia severity index include?