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流行性感冒 INFLUENZA

(DEFINITION)

Influenza is an acute infectious disease of short duration caused by a filterable ( ) virus (I), the influenza virus. It is characterised by a febrile condition, head-ache, congestion of the nasal passage, pains in the back & limbs, often accompanied by inflammatory complications( ) in the respiratory tract.

Aetiology --- (ETIOLOGY) the cause of a disease

There are 3 separate influenza viruses, They are A, B, & C. The naming follows the time of discovery of the virus body(or the antigen (2)) , i.e. it has the antigen. A is first separated and extracted in 1933. B type is found Influenza virus A in 1940 and C type in 1950. B & C type do not cause much trouble to us and only maintain for a very short period,i.e. sporadic ( ). They do not cause epidemic ( )(3) & pandemic(4) conditions.

Virus A is the chief enemy and responsible for all the serious pandemic which seems to occur once very four years. In 1964 a new type of influenza virus was separated. Its antigen belongs to the A type, but has little difference. It was so named A_1. In 1957, influenza again cause great pandemic in the world. The antigen type, this time, was again different from the others, but having much similarity with the A type. It was the type A_2. The recent virus which causes influenza is also A_2 type. Since the appearance of A_2 type, the other 2(A & A_1) become obscure.

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(PATHOLOGY)

Symptoms, Clinical Features & Complications

The virus invades all type of people of all ages. In old people and those who have other illness, such as the heart diseases, will be dangerous as they easily get fata complications(併發症) The people who have been invaded by the virus may not show symptoms due to their immunity power. The immunity (免疫) period after an att-ack is short varing from a few weeks to months. It is specific for a certain type of influenza virus.

The virus has a short incubation period within the human body. It extends from a few days to one week. The virus rarely visits the lungs, but the invasion of secondary pathogens,(病原物)(5), such as the Staphylococci & Streptocci (6), will cause much abnormalities of the respiratory system. They give rise to many dangerous com-plications. It was due to this reason that the pandemic in 1918 had killed at least 20,000 patients.

2 or 3 days after the infection of the virus, symptoms exist if the attacked person has no immunity against this type of virus. The virus invades the epithelial lining of the upper respiratory tract and some may go into the blood stream. This mild cat-arrhal(7)(傷病) illness causes the congestion of the respiratory tract. At the same time, head-ache & nausea(8)(噁心) give the patient much troubles and make himtired. The limbs and backbone may have mild pains. The body temperature rises to between 99°-101° if the symptoms are the febrile type(9) (發熱的). The pulse als increases. Further, the patient may have dry coughs. These signs prove the patient ill. A blood count shows that there is a decrease of W.B.C. or a normal data (10) But in the cases of having other secondary infections, leucocytosis(increase of WBC number)occurs. The chest will have no abnormal phsical signs.

The symptoms continue for a few days and then recovery takes place.selvingly. The patient, however, will have some degree of lasitude(tiredness) & mental depression for a time.

Other pathological changes are due to the infection of other pathogens. They are secondary infections. Laryngitis, acute tracheitis & bronchitis (is ending means inflammation, laryngitis means the inflam mation of the larynx) are some of the complications. When the old people get acute lobular pneumonia (II), they may be killed. The Staphylococcal infections (I2) are especially dangerous as they cause death within 48 hours if without urgent & suitable treatment. The Streptococcal infections are also dreadful. In these cases, W.B.C. number increases to 9,000-II,00 or more.

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(PREVENTION)

So far, we do not have any efficient method to control the spreading of the virus. Once itapproaches a city or place, it spreads quickly causing epidemics & pandemic . To prevent severe spreading conditions, early recognition of the presence of the virus in important. This is done in the process of diagnosis ((13) When it is foun special notification & hospitalisation must be given, If it is not done in the ear stage of spreading, serious epidemics may be the result. People should avoid going crowded places, such as the theatre, and the ill people should be isolated.

The influenza vaccines are available nowadays, but it is not efficient and only maintains for a short time as well. The vaccine contains A, A_1, A_2, & B types sour and may have an efficient period of a few months if it can function. It is applied to those already diseased people mainly, to prevent the arisi ng of complications of influenza.

Amantadine(another name-Symmetrel), a drug manufactured recently by theAmerican pharmacologists, has some uses on preventing the invasion of A_2 influenza virus. This drug cannot prevent the infection of other types of influenza virus.

(TREATMENT)

So far, we have not found a very efficient method to fight against diseases caused b filterable virus. For influenza, the same, we have no specific drugs. As the patient can recover selvingly, the only treatment we can perform is to prevent him from getting complications and, to give him a relief from pains. To Pg 65

The infected person should be kept in bed until complete recovery. He should drink a large amount of water, or otherwise his illness will become more serious. A light easily digested diet is given. Asperin is given to him to suppress his aches & codeine for his cough. 0.5-1.5 Gm. of triclofos is also useful in giving the patient a good sleep.

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Recently it is found that Amantadine has some effects on A_2 type influenza. It shotens the period or duration of the illness and can prevent people from the infection. But it has no effects on other types of influenza.

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Materials supplied & found by K.H.Lau, set by K.H.LAU. Reset by C.K.Lo
Materials from A Textbook of Medicine, & Practice of Medicine

(I) Microscopic particles(not a cell)varing from 100Å-3,000Å -1Å=1/10,000micron. Exhibiting both living(in a host) & non-living (outside the host) activities size.
(2) Antigen is a protein, not belonging to the human types, which invades the human body and gives rise to the release of antibodies which destroy the antigen.
(3) Epidemic-disease spredding commonly & quickly in a place in a time. Pandemic- disease spreading & effecting the whole country or the whole world seriously.
(4) Error
(5) Any organism, always microscopic, that causes a disease is called a pathogen.
(6) Staphylococci-oval bacteria in the form of clusters. Streptococci-oval bacteria in the form of chains or strings.
(7) Catarrhal (adj) diseases of the nose and throat.
(8) Nausea is a ill feeling, i.e. the disgust of food.
(9) Symptoms of influenza are divided into 2 types, the other is Respiratory type. Here is only a very general introduction.
(10) The normal data should be 6,000-8,000 for matured male & female.
(11) Lobular pneumonia is the serious inflammation of the lungs.
(12) The Staph. pyogens(pathogen causing the secretion of pus)(pus is a yellowish liquid flowing out from imflammated or poisoned wounds or tissues)( ) cause serious and fatal pulmonary complications.
(13) Determination of the nature of disease by observation of the symptoms.

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