

MEDICINE

War Pneumonia Not New

Disease may be 1942 alias for bronchopneumonia of grandpa's time. Virus pneumonias were reported before the war. Pneumonias due to variety of causative agents.

► WHEN YOU hear or read stories about "a peculiar wartime pneumonia," don't get frightened or think they signal another disease disaster like the influenza epidemic of the last World War.

"Wartime pneumonia" may be and in many cases probably is an alias for the bronchopneumonia familiar to grandpa and his family doctor. Pneumonia has gotten a lot of new names in the last 10 years, but the sickness is not new, and even the new names are older than the present war.

Until about 10 years ago there were two kinds of pneumonia appearing on hospital records and death certificates: lobar pneumonia and bronchopneumonia. Lobar pneumonia starts suddenly with chill, cough, pain in the chest or side and rusty sputum. It is caused by round micro-organisms called pneumococci. Before the discovery of the sulfa drugs, it was treated with specific antiserum, a special serum for each type of pneumococcus.

In bronchopneumonia the sickness did not always come on suddenly with chill, pain, cough and rusty sputum. It generally started more gradually, like a cold or bronchitis, which got worse. No typical pneumococcus was found to be causing the sickness and antiserum did no good. Doctors used to think bronchopneumonia was due to secondary germ invaders of the lungs, such as streptococci and staphylococci.

Long before this present war started, the diagnosis of bronchopneumonia began disappearing from hospital records, and diagnoses of atypical pneumonia, pneumonitis, virus pneumonia and the like began appearing. French and German doctors nine years ago began reporting these new kinds of pneumonia. As early as 1935 an American Army X-ray specialist reported finding among troops in Honolulu cases of what he called acute influenzal pneumonitis. The words pneumonitis and pneumonia both mean inflammation of the lungs.

The following year came an American report of what seemed to be bronchopneumonia which was claimed to be due to a virus. In the next few years

two groups of American scientists each found a different virus in cases of pneumonia.

Viruses are such small germs they cannot be seen even with ordinary high-powered microscopes and can pass through the pores of filters that stop larger germs such as the pneumococci. Closely related to viruses are a group of germs called rickettsia which pass through filters like viruses but which are large enough to be seen under microscopes.

A rickettsia is the cause of a kind of pneumonia discovered in Australia in 1937. The Australians call it "Q" fever and in 1940 cases of "Q" fever were also discovered in the United States.

"Q" fever, like the atypical or virus pneumonias so much discussed these days, is a mild disease that might be called influenza, rather than pneumonia,

unless the patient's chest is X-rayed. Patients seldom die of either "Q" fever or the atypical pneumonias reported nowadays. You remember that bronchopneumonia was not very often fatal either except in elderly people.

Medical opinion these days is that some cases of pneumonia may be due to rickettsia, the "Q" fever germ; that some may be due to two other identified viruses; that some may be due to the virus causing psittacosis or parrot fever; and that bacteria such as staphylococci or streptococci and possibly other still unidentified viruses probably cause the rest of the pneumonias that are not pneumococcal pneumonia.

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ENGINEERING

Girl Computer Has Made Specialty of Light Curves

► CURVES—*isocandle* and *isolux*—are the specialty of Miss Ruth Forbes. She is the only woman in the United States computing these lines for the use of electrical engineers.

They are similar to the lines on weather elements; only these lines show



CURVES, isocandle and isolux, are being computed by Miss Ruth Forbes of General Electric. In the background are charts showing the lines which indicate distribution of candle power from a light unit.