Does the Mumps Virus Cause Appendicitis?

Research at British Hospital

A three-year investigation at a Northern England Hospital has revealed that a previous attack of mumps in a child may predispose it to acute appendicitis. This could be an important breakthrough in the fight to stamp out the latter disease.

The investigation, initiated in 1963 by Dr. P.S. Gardner, head of the Joint University and Hospital Department of Virology at the Royal Victoria Infirmary, Newcastle-upon-Tyne, was carried out in cooperation with Dr. R.H. Jackson of the University Department of Child Health at the same hospital.

Although acute appendicitis is one of the commonest illnesses which require an operation in children, adolescents and young adults, the cause of the disease has long remained a mystery. It had, however, been observed that an infection of the upper respiratory tract often preceded appendicitis, and the present investigation was undertaken on the assumption that the viruses which cause this type of infection might also cause appendicitis.

To test the theory, 78 children admitted to the hospital with acute appendicitis, 21 of whom had had a respiratory infection within two weeks of the onset of appendicitis, were examined to find out if the same virus was present in these illnesses. The results of the examinations were, however, negative.

When sera from 59 of the 78 children with acute appendicitis, on the other hand, were examined, an interesting and completely unexpected finding was made. It was shown that all these children had considerably increased amounts of antibodies against mumps virus when compared with 97 children without appendicitis who served as controls. This suggested that these 59 children had previously had mumps.

On reviewing the case histories of all the 78 children, it was found that 31 of them, including 25 of the 59 whose sera had been examined, had previously suffered from mumps. Since it is well known that 50% of all mumps infections are so slight that they are never noticed, and as only 75% of all cases of mumps with definite symptoms are ever seen by a doctor, it can safely be assumed that a further number of children had previously had mumps. The mumps virus can also manifest itself not only as mumps but in a variety of other ways, such as inflammation of the pancreas, liver, brain and sex organs. Thus cases which were in fact mumps may have been wrongly diagnosed.

Further Research Under Way

A spokesman for the Royal Victoria Infirmary explained: “This must not be taken to mean that every child infected by mumps virus is predestined to get appendicitis. Nor is it suggested that a first infection with mumps virus produces appendicitis directly, but it is believed that either a second infection with virus or possibly—though this is unlikely—with a related virus may occur, or alternatively that this virus may be latent in the appendix and suddenly, for reasons as yet unknown, become active and cause appendicitis.

“It is of vital importance to establish which of these two hypotheses is correct since, once the cause of appendicitis is known, this may lead to the prevention of future occurrences of the disease. To this end further research is being carried out at the hospital.”

(With ack. to B.I.S.)

ANNOUNCEMENT

ATTENTION UTTAR PRADESH NURSES

Trained Nurses, Midwives, Auxiliary Nurses-Midwives, Health Visitors and Public Health Nurses of Uttar Pradesh, win a SILK SARI by entering the ESSAY COMPETITION sponsored by the Executive Committee of the TNAI U.P. State Branch.

Write an Essay of not less than 500 words in the FIRST PERSON (i.e. using the pronoun 'I throughout) in Hindi, Urdu or English, on the subject: How I, with my special training, can help the Family Planning Programme?"

You need not be a member of the Association to enter the competition. This is open to all trained nursing personnel.

Please write your name and address at the bottom of the Essay and send it to: Mrs. S. Faridi, 23 B, Outram Road, Lucknow, not later than July 7, 1967.