way of measuring the number of specific antibodies against the virus in the serum sample.

Requirements of Haemagglutination Inhibition Test

Serum sample, Known virus suspension, RBC suspension from a specific source (Eq. For Rubella Virus, RBCs from newborn chickens can be taken. Rubella virus can agglutinate RBCs of newborn chickens), Diluting solution such as saline

Procedure of Haemagglutination Inhibition Test

The general procedure is as follows:

- 1. A serum sample is taken from the suspected patient.
- 2. Serial dilution of the sample is performed in saline solutions.
- 3. Then a typical amount of virus is added to the solution and incubated.
- Then RBC suspension is added to it.
- 5. The components are allowed to mix.

5. The components are allowed to mix. 6. And finally, the presence or absence of haemagglutination is observed. Result Interpretation of Haemagglutination Inhibition If the latient's serum contains neutralizing antibodies then haemagglutination won't be observed in the sample and it will be considered as a positive test.

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The neutralizing antibodies bind to different binding sites on the virus and won't let it bind with RBC preventing the haemagglutination.

The extent of haemagglutination in different dilutions will help to determine the severity of infection or the amount of neutralizing antibodies.

Applications of Virus Neutralization Test

- Covid-19 neutralizing antibodies test is used to detect the respective infection in an individual and its severity.
- It can be used to detect various viral infections such as measles, mumps, influenza, etc.