Chodren Ghale

Oral Pathology paper

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Dr. Brown

**Mumps**

Mumps is a contagious disease caused by the Mumps virus. It is also called Parotitis. The people suffering from this virus have swollen salivary glands, swollen jaws and it is tender to touch. Symptoms usually appear 16-18 days after the infection; people who gets mumps have either mild symptoms (that in most people recovers completely in two weeks) or no symptoms. It is mild in most people but can cause serious, long- lasting problems that include orchitis, oophoritis, meningitis, encephalitis, or and/ or also loss of hearing.

It is mostly contagious a few days before and after an infected person develops symptoms. It can be spread through direct contact with saliva or respiratory droplets like spread through coughing, sneezing, or talking, sharing items with saliva, close contact activities, etc. It mostly occurs in young adults who either did not receive MMR vaccine or did not have mumps as a child. There is currently no cure for Mumps, but the infection usually goes away in a week to two. The only treatment provided for this is to relieve symptoms and includes getting plenty of rest, staying hydrated, applying warm or cool compress to the swollen glands (helps relieve pain), and painkillers if painful; aspirin should not be given to children under 16 years old. The vaccination for mumps started in 1967, it decreased the cases of mumps to less than 99%. The best way to protect from getting mumps is the MMR vaccine. This vaccine is a combination vaccine that protects again three diseases; measles, mumps and rubella. The mumps vaccine is only given to 12 months through 12 years of age and is given in two doses now. The first dose is given between 12 to 15 months of age while the second dose is given at 4 to 6 years old. If not given during childhood, it needs to be given in two doses each dose separated by 28 days. It is effective and has no side effects except mild rash or fever. Some doctors offer MMRV vaccine, it has an addition of the varicella vaccine to protect against chicken pox. Even with the MMR vaccine there are still cases of Mumps outbreaks reported every few years.

The most recent outbreak was from 2015 to 2017, where 9,200 cases were reported that included households, schools, universities, workplaces and many other groups of people. There are many other diseases that have similar symptoms as mumps and are clinically diagnosed as mumps. A retrospective study was done in Italy to diagnose clinically classified mumps by laboratory criteria. They brought participants who had one or more dose of the MMR vaccine, one dose of the vaccine and some had no dose of the vaccine at all. After the participants showed symptoms of mumps, they collected serum or saliva from the diagnosed participant and sent it for confirming the measles virus. It was found out that 19.8 % of the participants with mumps symptoms were infected with Mumps virus but with EBV. This showed the importance of lab diagnosis before we conclude that an infection is caused by mumps virus just because it has similar symptoms.

There are people who believe that ASD (Autism Spectrum Disorder) is associated with vaccines, especially the MMR vaccine. There has not been any evidence supporting this decision. To research this topic, several studies have been done. In one of a retrospective cohort study, they selected participants aging from two and five years. The research took in account of the siblings of the children, whether they had ASD. They separated the children with siblings having ASD and children without. Many people believe that the MMR vaccine is a contributing factor to ASD. Surveys showed that parents with children who have ASD are less likely to immunize their second child in the fear of triggering the disorder. There were no significantly statistical difference in rates ASD diagnosis between immunized and nonimmunized children. The study concluded that the results of the experiment was that the MMR vaccine is not associated with ASD. The vaccine did not contribute or cause the ASD in those children with siblings with the disorder as well as without. It was also seen that children with an older sibling with ASD get vaccinated either one dose or not at all; these might have led to Mumps outbreaks we hear about in times.

**Citations:**

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