Frequently Asked Questions (FAQs)

COVID-19 Vaccination for People living with Epilepsy
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Introduction

The world has seen a pandemic of unprecedented nature since Dec 2019. The rapidity with which the COVID-19 virus has spread across the world and infected millions of people, bringing down the healthcare systems of several countries, calls for extreme measures.The scientists all over the globe have worked very hard to produce vaccines in record time of less than a year. The vaccines – many of which would have normally taken more than a decade to enter into the common market, have been in public domain in less than few months since the start of the pandemic. The first mass vaccination program started on Dec 2020 according to WHO.

Any new drug when introduced for the consumption of the general public, takes its time to be accepted by the medical fraternity lest alone the common man.This vaccine has been developed more quickly than previous vaccines, leading some people to worry that this was rushed.

There are numerous doubts arising in the minds of the people regarding the vaccine. How safe is the vaccine? What are its side effects? What is its efficacy? Which vaccine to take?

This article addresses a few of the questions that could arise in the minds of People with Epilepsy regarding the COVID-19 vaccine.

1. **What is vaccination and how do vaccines work?**
   Vaccination is a safe and effective method of protecting people against harmful disease even before they come in contact with the organisms. It is a simple procedure which works by stimulating the body's natural defense mechanism to build specific resistance against a particular infection.

2. **COVID vaccines were developed in record time, are they safe ?**

   The COVID vaccines are going through the same rigorous safety assessments as other vaccines, and corners are not being cut.Advances in genetics allowed scientists to determine the genetic code of the COVID-19 virus very early, which was critical to making the messenger RNA for the vaccine. These vaccines have been carefully studied, and large numbers of volunteers who received the vaccines have been closely followed for side effects. The data suggests these vaccines are very safe.

3. **What are the vaccines available in the World ?**

   WHO issued Emergency Use Listing for the Pfizer COVID-19 vaccine, Moderna, AstraZeneca / Oxford COVID-19 vaccine and Janssen produced COVID-19 vaccines as on April 2021.

4. **Which COVID-19 vaccines are licensed in India ?**

   Two vaccines have been granted EUA (Emergency Use Authorisation) by the CDSCO   (Central Drugs Standard Control Organisation). The two vaccines are COVISHIELD(Astra-Zeneca's produced by Serum Institute of India) and COVAXIN (manufactured by Bharat Biotech Limited) as of April 2021.

5. **Is the COVID-19 vaccine safe for people with epilepsy ?**
   Based on the currently available information, the COVID-19 vaccine is found to be safe in people with epilepsy. There is no available data to say that patients with epilepsy are at greater risk of COVID-19 vaccination complications.

6. **Where can I get the vaccine ?**
   The vaccine is available in both government and private hospitals, though the pricing is variable.

7. **What are the side effects of COVID vaccine ?**

   Approximately **15%** of persons developed local pain or swelling at the vaccine site that resolve in 24-48 hours. Approximately **50%** of persons develop headache, chills, fatigue, muscle aches or fever that is also transient (lasts for a short time), and is a sign that your immune system is responding to the vaccine.

8. **Does the frequency of seizures increase after COVID-19 vaccination ?**
   According to the currently available world literature, there is no data to suggest any worsening in seizure frequency, post COVID-19 vaccination.

9. **Should I get the vaccination despite having no co-morbidities apart from epilepsy ?**
   COVID-19 vaccination is known to reduce the severity of the COVID illness. Since healthy individuals can also develop severe COVID infection, the vaccine helps in reducing the severity of infection and thus the need for hospitalization.

10. **What are the other advantages of COVID vaccination ?**
    COVID vaccination will also help in preventing the spread of infection to those around you. Thus reducing the risk to the vulnerable population from getting the disease and having a severe infection.

11. **I already had COVID-19 and recovered. Do I still need to get the vaccine?**
    There is no concrete evidence as of now to suggest that there is long lasting natural immunity against COVID. There are very case reports of people suffering from a second episode of COVID infection despite recently having had COVID. The natural immunity after COVID-19 may not last very long. Many experts suggest to get vaccinated despite having had natural COVID infection.

12. **I am a pregnant women with epilepsy, can I get vaccinated ?**
    The current data is not sufficient to suggest the safety of COVID-19 vaccination in pregnant women. One needs to discuss with one's health care provider regarding the pros and cons of vaccination in a high risk group.
    The current data is not sufficient to suggest the safety of COVID-19 vaccination in lactating women. One needs to discuss with one's health care provider regarding the pros and cons of vaccination in a high risk group.

13. **I have child with epilepsy, can I vaccinate him/her ?**

    Vaccines are tested in adults first and then tried on children. As of now, there are no COVID-19 vaccines recommended in children.

14. **Are those with epilepsy at risk of seizures secondary to post vaccination fever ?**

    There is no evidence that persons with epilepsy are at higher risk of side effects after vaccination. As with any vaccine, some persons may develop a fever which could lower their seizure threshold for the short term, and rarely could result in a break-through seizure. **There is no evidence that this vaccination results in worsening of the epilepsy.**

15. **Should those with seizures triggered by fever avoid getting the COVID vaccine?**

    Elevated temperature is a common side effect after getting a vaccine. Fevers have been reported as a side effect after getting the COVID vaccine, because the immune system is reacting to bring immunity in the body. Some people with epilepsy have seizures that are triggered by fever. However, the available data about the risks of COVID and the safety of the COVID vaccines **still support vaccination**.

16. **How effective is the COVID vaccine ?**

    The experimental data so far suggest that vaccines are at least **70 to 90%** effective after two doses in preventing symptomatic COVID infection and in developing severe disease. It is not known if the vaccine completely prevents any infection with COVID or just prevents development of disease. The effectiveness is slightly variable amongst the vaccines. But more or less between 70 to 90 % effective after two completed doses.

17. **Is it mandatory to take vaccine ?**

Vaccination is voluntary. However, it is advisable to take the complete scheduled course of the vaccine to protect against the disease.

18. **Can we change from one vaccine to another if we get to know that the other vaccine is more efficacious ?**

    All the COVID-19 vaccines have more or less comparable efficacy and side effect profile. But it is advisable to complete the **entire schedule of vaccination of one type only.** The multiple COVID vaccines are not interchangeable.

19. **I have COVID19 infection at present, can I take the vaccine ?**

    Since people with active COVID-19 infection are at risk of spreading the virus to others at the vaccination centres, they should defer vaccination for atleast 14 days after the symptoms have resolved.

20. **What are the contra-indications for the vaccine**?

    1. Persons with history of :
       a. Anaphylactic or allergic reactions to a previous dose of COVID-19 vaccine.
       b. Immediate or delayed-onset anaphylaxis or allergic reaction to vaccines or injectable therapies, pharmaceutical products, food items etc.
    2. Pregnancy and Lactation : As on the current information
    3. **Temporary contraindications** : Deferred for 4-8 weeks after recovery
       a. Persons with active COVID-19 infections
       b. COVID patients who have received monoclonal antibodies or convalescent plasma.
       c. Acutely unwell and hospitalised patients due to any illness.

21. **Should we avoid Anti-epiletic drugs when taking the vaccine ?**

    There is no contra-indications that people on AEDs should avoid the vaccination. **They should take their regular scheduled medications without any disruption.**

22. **What medications should be avoided before taking COVID-19 vaccine ?**

    There is no need to discontinue any medications while receiving COVID vaccine **except for anti-coagulants and dual anti-platelets**. The same need to be discussed with the physician who has prescribed these medications regarding when to STOP and when to RESUME these medications while getting vaccinated. (The present recommendation is that people on anticoagulants and anti-platelets can safely take the vaccine, and should inform the doctor prior to vaccination)

23. **Do epileptic medications alter the immunogenic response to COVID-19 vaccines ?**

    There is no available data to suggest an altered immunogenic response in patients receiving vaccine against COVID-19. If you are taking steroids or Everolimus (Used in Tuberose Sclerosis) for seizures than you need to speak to your treating doctor regarding vaccination

24. **Is the vaccination contra-indicated in people with chronic illness ?**

    Chronic illness of either neurological, cardiac, pulmonary, metabolic, renal, malignancies, etc are not contraindications for vaccine. The vaccine is there to reduce the severity and to prevent mortality in people with co-morbidities.

25. **Will vaccines provide long term protection ?**

The vaccines for Covid -19 infections have been developed only in the past few months, **hence it is too early to know their duration of protection.** But most of the people vaccinated, develop an immune response that provides some protection against re-infection.

26. **Are the vaccine protective in other COVID-19 virus strains ?**

    COVID-19 vaccines are expected to provide at least some protection against new virus variants. They help to prevent serious illness and death. There are other COVID-19 vaccines in the making to combat the new variants.

    27 What is the interval between the first and second dosage and why was it changed ?

    The current recommedation is for a minimum **6 to 8 weeks** gap between the first and second dosage for better immunogenic response. As the vaccines were released in a short period of time, we continue to learn more about them. Current information is that the response is better with a longer interval. **The first dose gives around 70 % protection with the second around 90 %.**

27. **Is the protection instant after I have been vaccinated?**

    The protection is definitely not instant after vaccination. It takes atleast two weeks in younger people and three weeks in older people to have a good immunogenic response. There is a better antibody response after the second dose.**No vaccine provides 100% protection against any disease.**

28. **Do I need to continue to mask and maintain social distance even after I get the vaccine ?**

    It is very important to continue to use all the available tools to stop this pandemic. Most important amongst them is the **3 W's – Wear a mask, Wash your hands and Watch your distance**. **These 3 measures need to be followed even after vaccination in order to help prevent that spread**.

    As the COVID-19 pandemic surges all over the world and unfolds its destructive potential, one needs to do everything possible to put a curb on this pandemic. The common man has as much an important role to play as that of the healthcare providers, scientists, policy makers. **Our health in our hands**. While we continue to learn more, one needs to do everything possible to **STOP** the spread of the virus and to reduce the severity and mortality. Vaccination is an effective tool in this armamentarium against COVID-19. **GET VACCINATED, STAY SAFE.**