

Podcast: Possible side effects of a Covid-19 vaccination

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Welcome to the second podcast, which covers patient education on the vaccination against Covid-19. In our first podcast on this topic, we talked about the numerous questions and rumours that patients present to us regarding a Covid-19 vaccination.

Today, we want to look at other clinical aspects of the vaccination.

I am Ute Papkalla and I am here with my colleague Carina Dinkel. We both belong to the health team of the German Institute for Medical Mission, in short Difäm.

Covid-19 is an invisible but real threat to communities and is particularly dangerous for the elderly and for people who are vulnerable due to pre-existing diseases. What must patients know about the vaccination?

It is very important to inform the patient that most Covid vaccines require two shots. It will always take about two weeks until the immune system has finished its antibody production after a vaccine shot. Protective efficacy differs from one vaccine to another. For most vaccines, only two shots establish the full protective potential: Pfizer/Biontech, AstraZeneca, Moderna, SINOVAC, Sinopharm and Sputnik. The only exception is the Janssen vaccine of Johnson and Johnson, which requires only one shot.

So many vaccine names are circulating and people wonder, which one they should take.

Honestly speaking, the question is rather, which vaccine is available. The vaccines differ in efficacy but all of them offer good protection. Therefore, people should use the available vaccine. If you want to know more about the different types of vaccines such as the mRNA vaccines or the inactivated virus vaccines, you can listen to our podcasts on these topics.

Carina let us look at the side effects of the Covid-19 vaccination. Since millions of people have taken their vaccines, we know by now that Covid-19 vaccines may lead to more body

reactions than other vaccines that we are familiar with. How can we prepare the patients accordingly without frightening them too much?

It is important that we let the patient know that there may be strong flu-like side effects after vaccination. They hit younger people harder than older people.

Most frequent is a painful red swelling of the site where the shot was given. About half of all patients get a headache and feel tired. Muscle pain, fever and shivering are also quite frequent. Some people experience nausea or diarrhoea. Sometimes we see swollen lymph nodes, dizziness or a skin rash.

All these symptoms disappear within a few days. We can point out to the patient that these side effects are a good sign and show that the body is building a protective army of antibodies against the virus. People should just rest, apply a cooling cloth to the arm if it is tender and drink enough fluids.

However, what about serious, long-term complications after vaccination? This may also be a concern of patients.

Yes and these concerns are understandable given the fact that the vaccines are very new. We have already seen some serious complications such as thrombosis combined with thrombocytopenia, a reduction of the blood platelets. Some patients suffered from blood clots in unusual places such as the sinus vein. Let me underline that the numbers of these complications are very small. We have also seen cases of endocarditis and myocarditis, both heart inflammations in young adults, statistically 12.6 cases per million of second doses administered.

These complications are so rare that we can say with confidence that the benefits of the vaccination are far bigger than the risk of suffering from such a rare complication. What does that mean? It means that more non-vaccinated people will end up disabled or dead due to Covid-19 than vaccinated people who experience a severe complication.

Can there also be allergic reactions to the vaccines?

Yes, we have seen allergic reactions in very few patients. The reaction will be like an anaphylactic shock, which has to be treated with adrenalin, anti-histamines and cortisol. For this reason, you should advise people to stay another 30 minutes after their vaccination so that you can react immediately to someone who shows symptoms of an allergic shock. Common symptoms are low blood pressure, a weak and rapid pulse, fainting, constriction of the airways and skin reactions. Just to be clear: Allergic reactions are possible to any drug or vaccine. Allergic reactions to the COVID vaccines are not more frequent than to other vaccines or medications.

Which questions should I ask in my anamnesis when a patient comes to me for vaccination?

You should always check if the patient has an acute infection with fever. If this is the case, you should not vaccinate that person. It is also good to know if someone has already had a confirmed Covid-19 infection. The practices differ when it comes to the interval between the infection and the vaccination. There should be between 4 weeks and 6 months between a symptomatic COVID infection and the vaccination. If this is not possible, prepare the patient for rather heavier flu-like symptoms after the shot. The sooner it is given after the infection, the heavier the side effects. According to the WHO, persons who had a confirmed Covid-19 infection should only be vaccinated with one shot.

You should also ask your patient about any chronic condition. The Covid-19 vaccination is recommended for all adults of 18 years and older with pre-conditions of any kind including autoimmune disorders. These pre-conditions include hypertension, diabetes, asthma, pulmonary, liver or kidney disease or chronic infections which are stable and under control. These persons benefit most of vaccination.

You will also have to know if your patient is under immune-suppressive treatment or has a compromised immune system for other reasons. These persons might not be fully protected despite two shots of vaccines. You also want to know if the patient has a blood coagulating disorder. If this is the case, the follow-up of the patient should be close. It is very important to check if the patient has ever reacted allergically to other vaccines or medications. If a severe allergic reaction has ever occurred, you should refrain from vaccinating this person because the risk is too high especially if the drugs mentioned before – adrenalin, cortisol and anti-histamines – are often not available as injections.

You should ask every woman in reproductive age if she is pregnant. By now, there is growing evidence that the benefits of a vaccination outweigh known or potential risks of a vaccination during pregnancy.

Carina thank you very much for this overview of the questions that we should ask patients who want to be immunized. Let me quickly summarize the main points. We should check for

- An acute infection
- A former Covid-19 infection
- Other chronic health conditions
- Immune-suppressive disease or treatment
- A blood coagulating disorder
- Known allergic reactions to vaccines or medications
- Pregnancy

Difäm has prepared a question guide, which can be used as a guide in your patient contacts. It is available on our website www.difaem-community.de.

We are now at the end of our podcast on patient education. We hope that it has been of value for you. Do not hesitate to give us feedback in our WhatsApp groups.

And like always: Take your precautions and keep safe and healthy and be blessed.

Sources:

<https://www.cdc.gov/vaccines/covid-19/hcp/answering-questions.html>

https://www.rki.de/DE/Content/Infekt/Impfen/Materialien/Downloads-COVID-19-Vektorimpfstoff/Aufklaerungsbogen-de.pdf?__blob=publicationFile

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