FAQs; ITP and Covid-19 vaccination

1. **ITP and the Covid-19 Vaccine – Would having ITP be classed as an underlying condition and help push you up the priority list?**

   There is no evidence that ITP alone increases the risks of catching Covid-19 and would not be considered an underlying condition. However, when taking into account other risk factors such as age, any ongoing treatment (such as steroids at higher doses {greater than 20mg}, or immunosuppressive drugs) or other health conditions it would be part of the equation in considering priority.

   In ITP COVID-19 infection, like all viral infections, may cause a relapse often with a rapid fall in the platelet count. It is important to be aware of this and know who to contact if there is any suggestion that the platelet count has dropped or if there is any excessive bleeding or unusual bruising.

2. **Could ITP affect the immunity which a Covid vaccine is supposed to provide?**

   Someone with ITP will react normally to the Covid-19 vaccine and show the same response as any other person. The response may be reduced in patients who have recently received Rituximab (within 6 months) or are taking immunosuppressive drugs but this will still provide protection and the benefits outweigh any reduction in response. Splenectomy does not affect the response to the vaccines.

3. **The Pfizer vaccine has a supposed success rate of 95% 9 (e.g., a 5% failure rate), could ITP patients be in that 5%?**

   There is no suggestion that ITP can decrease the rate of response to the vaccine and the failure rate would be no different than in the general population with any of the vaccines available. In general, responses may be less with any vaccines in older males, but this reflects the decline in immune response seen in this group. This cannot be predicted, and the potential benefits of vaccination are greater than any theoretical risks of poor response.

4. **I was diagnosed with ITP and although it was never proven, they believed that it was triggered by my typhoid injection. Since the age of 17 (I am now 28 years old), I have been ITP free, and my platelet count has been 'normal'. I still have an annual blood test to check on my platelet count, but I am cautious about getting the COVID vaccine in case it triggers my ITP again.**

   A reduced platelet count has been reported in very small numbers of patients after vaccination for many different viruses, including the common ones, such as measles-mumps-rubella (MMR), Haemophilus influenza, hepatitis B virus, human papilloma virus, varicella-zoster, diphtheria-tetanus-pertussis(DTap), polio, and pneumococcus. The reduction is usually relatively mild and is transient. In the patient with underlying

ITP, however, it may be more marked but is still usually only a short-term problem. It has been shown that the risk is less than 10 per million doses of vaccine, covering all the common vaccines. The COVID-19 vaccine trials have not reported this in the studies so far. The numbers given the vaccine are far less. Although it remains a possibility, the risks are outweighed by the benefits of receiving the vaccine. In Covid-19 infection thrombocytopenia is relatively frequent occurring in up to 10% of patients with mild disease and 20% in those who are severely affected. It is recognised that in patients with ITP the platelet count may fall markedly in any patient who becomes infected.

5. **I am concerned about whether a vaccine would work post splenectomy as I thought the vaccine worked by getting the body's immune system to recognize anti bodies and then kill the virus, but with no spleen I was wondering how my body could do this?**

   The spleen is only one part of the body's immune system that produces antibodies in response to vaccination and infections that helps to protect us all from the serious effects of the many viruses and bacteria to which we are all exposed. It is estimated to be about a third of the immune system in terms of mass but following removal the remaining lymphoid system will compensate for its removal.

   In ITP the spleen is also important as it captures and destroys platelets that have been coated with autoantibodies and this is the reason for its removal. With access to newer treatments, and the high failure rate, splenectomy is becoming much less frequent. Patients who have had a splenectomy have an increased susceptibility to a small number of infections and should be up to date with their pneumococcal, haemophilus influenza and meningitis vaccinations. Flu vaccination is also recommended. Experts do not believe splenectomised patients are at increased risk of COVID-19 infection but are susceptible to bacterial infections and must be vigilant with their prophylactic antibiotics during this time.

6. **At a previous ITP Convention, I remember one of the speakers talking about ITP and T cells. I did not fully understand at the time, but now with the vaccine from Pfizer saying it will target 'T cells', I was wondering whether this vaccine would be better for patients with ITP or whether we should avoid it?**

   In response to infection the body produces antibodies but it also responds by developing a cellular response with one of the subsets of lymphocytes, known as T cells. Antibodies latch onto infective organisms in the blood stream but T cells may also help destroy infected cells. They are also important in establishing immune memory and this is important for establishing longer-term term immunity from infection. It has been demonstrated that a T-cell response is stimulated by all the vaccines being trialled. Normally the response persists long after antibodies can no longer be detected and this is likely to be the case following the Covid-19 vaccines. The response does not impact on the ITP itself and all the vaccines can be used in ITP.

7. **Are there any ITP Treatments that could react with any of the new Covid-19 vaccines and negate the vaccines effects?**

As has been mentioned higher doses of steroids (over 20mg), immunosuppressive drugs and Rituximab may reduce the response to the vaccines, however, this does not mean that this will significantly reduce the resistance to Covid-19 infection. It is generally considered that any response is better than not having the vaccination.

8. Once I have had the vaccination does that mean that I am safe from catching Covid-19 and should I continue the general precautions?

We do not know whether the vaccine will prevent infection or whether it will just lead to an infection of much reduced severity. It is, therefore, important that all patients with ITP are aware of the information regarding their risk stratification and whether they are considered clinically extremely vulnerable. They should be familiar with COVID-19 protective measures and self-isolation as appropriate, maintaining mental well-being, and who to contact if they are feeling unwell with fever and cough or are having difficulty breathing.

It is generally accepted that Vitamin D is important in the first line of defence against infection and the body's response to infection. Vitamin D levels are generally lower in the obese, diabetics and people of BAME origin and also tend to be lower in men than in women. Although it remains controversial additional Vitamin D may help increase the body's resistance to the impact of infection and taking supplements, over and above the normal diet, may be worthwhile. When taken at recommended doses there are also no recognised risks and their use should be discussed with your clinicians.

The ITP Support Association, The Platelet Mission, Kimbolton Road, Bolnhurst, Beds, MK44 2EL, UK

Registered Charity Number 1064480