DOI: 10.5578/ced.202055 • *J Pediatr Inf 2020;14(3):e155-e156*

Questions on Immunization and Vaccination and Short Answers

Bağışıklama ve Aşı ile İlgili Sorular ve Kısa Cevaplar

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Cite this article as: Kara A. Questions on immunization and vaccination and short answers. J Pediatr Inf 2020;14(3):e155-e156.

Question 1: Is it required to vaccinate the infant or the person with the disease agent even though they have already had the vaccine-preventable disease?

Since immunity does not or may not develop following the infection or clinical picture of some infectious agents, this subject at hand must be evaluated separately for each agent.

- Persons proving with medical records that they have had any of the Hepatitis A and Hepatitis B disease do not require vaccination.
- Persons proving with medical records that they have had chickenpox after the age of 1 do not require vaccination. However, there is no harm in administering the vaccine, either. In the event of having had chickenpox before the age of 1, sufficient immunity may not have developed. Therefore, routine chickenpox vaccine should also be administered in the 12th month in children who have had chickenpox before the age of 1. However, it should be ensured that all lesions have been dried and at least 4 months have passed before the administering of the varicella and MMR vaccines.
- Since protective antibodies do not develop after being exposed to pertussis, tetanus and diphtheria in all age groups (independent of the age) and to invasive Hib disease (like meningitis) in children under two years of age, vaccinations (including those given against the diseases mentioned in this article) are continued in accordance with the vaccination schedule as soon as possible.
- Moreover, sufficient protection is not provided upon being exposed to rotavirus, and hence the infant is recommended to receive the vaccination if he/she is at the appropriate age range for the vaccine (should be 15-weeks-old or younger before the first dose of the vaccine) after clinical recovery is sustained.
- In the event of having had pneumococcal or meningococcal infection, the vaccine should be received since the agents have more than one serotypes. Furthermore, when persons have these diseases before the age of 2, protection does not develop even against the serotype being exposed to. In the presence of an indication, pneumococcal and meningococcal vaccines must be administered as soon as possible after clinical recovery is sustained for these diseases.
- In the event of having had one of the measles, mumps, or rubella diseases, MMR vaccine should be administered to

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Received: 23.07.2020 **Accepted:** 11.08.2020 **Available Online Date:** 27.11.2020

be protected against other diseases. Being exposed to the disease does not cause an increase in the adverse effects of the vaccine. If the MMR or varicella vaccine should be administered after having had measles, the vaccine is administered after 4 weeks the earliest following the onset of the measles and rubella rashes.

- Being exposed to the disease does not provide complete protection since serotypes of the influenza virus is multifold and the antibodies formed after the disease have a short-term protective effect, and thus it cannot substitute for the vaccine. The influenza vaccine can be administered in the presence of upper respiratory tract infection. Hospitalization due to findings of influenza or similar diseases does not contraindicate vaccine implementation.

Question 2: Which vaccines can be received simultaneously and are there any vaccines that cannot be administered within the same period?

There is no harm in administering the vaccines on the same day. More than one vaccine can be given simultaneously.

Children who fall behind the vaccination schedule require many vaccines to be administered on the same day. Hepatitis B, Hepatitis A, BCG, DaBT-IPA-Hib, CPV, OPA, MMR, and varicella vaccines can be administered on the same day.

Administering a great number of vaccines on the same day does not affect the immune system of the child.

- Despite indication in terms of both vaccines, there are two exceptions for the use of two vaccines of the same day:
- In risk groups (i.e. persons with chronic lung, liver, heart, and renal diseases, and diabetes mellitus, immunosuppressed persons, those with hyposplenia/asplenia, those who have undergone splenectomy) requiring both the conjugate pneumococcal and polysaccharide pneumococcal vaccines, these two vaccines cannot be administered simultaneously.
  - -Polysaccharide vaccines are not used before the age of two years.
  - -Polysaccharide pneumococcal vaccines can be administered the earliest 8 weeks after the age-appropriate doses of the conjugate pneumococcal vaccines are completed in children aged 2-18 years.
  - - In adults (≥19 years), conjugate pneumococcal vaccine is administered first, and then the polysaccharide pneumococcal vaccine is given the earliest 8 weeks or one year later (according to the presence of risk) (see Risk-Group Chart)
- Persons with congenital or acquired asplenia/hyposplenia, both pneumococcal and meningococcal vaccines are indicated. However, it is known that co-administering the CPV-13 vaccine and the 4-valent conjugate meningococcal vaccine (Men ACWY-D) commercially-named as Menactra in this group patients slightly decreases the response to 3 serotypes of pneumococcus. Therefore, if the 4-valent conjugate meningococcal vaccine (Men ACWY-D) commercially-named as Menactra should be administered to persons with congenital or acquired asplenia/hyposplenia, it should be given the earliest 4 weeks after the completion of the CPV-13 series. In this risk group, there is no need for time to pass in order to administer the conjugate meningococcal vaccines commercially-named as Nimenrix or Menveo. They can be administered simultaneously or without any specific day range with the CPV-13 vaccine.
- Since administering meningococcal serogroup B vaccine simultaneously with any of the other vaccines is known to cause higher fever, it is recommended to be given with paracetamol (a total of 3 paracetamol doses: the first dose to be given 30 minutes before the vaccine, the second and third doses to be taken every 6 hours afterwards). Conjugate meningococcal vaccines (Menveo, Nimenrix or Menactra) and meningococcal serogroup B vaccines can be administered simultaneously or without any specific day range.
- Oral polio and rotavirus vaccines can be administered simultaneously or without any specific day range with the other vaccines included in the childhood vaccination schedule (including BCG). If vomiting occurs within the first 10 minutes of oral polio intake, the vaccine is repeated. When oral polio and oral rotavirus vaccines are simultaneously administered, oral polio should be administered first. Oral rotavirus vaccine can be administered five minutes later.