Questions on Immunization and Vaccination and Short Answers

Bağışıklama ve Aşı ile İlgili Sorular ve Kısa Cevaplar

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Question 1: Can I give my baby a bath after getting vaccinated?

Having a bath after vaccine administration is possible, there is no harm in giving the baby a bath after getting vaccinated. There is no need for families to treat their babies differently than usual after vaccination. On the contrary, warm shower is recommended if fever occurs after vaccination (1,2).

Although there are various views on BCG vaccination, it is generally accepted that there is no harm in giving the baby a shower-like bath after BCG vaccine administration (3,4). It is specified that quick drying of the vaccination area without compressing and scrubbing would be appropriate (3,4). Nonetheless, there are also suggestions stating that bathing should be avoided following the first 24 hours of BCG vaccination.

A similar approach is valid for the PPD test. Following PPD administration, a shower-like bath can be taken, and a special protection is not needed during the bath.

It may be considered a detail, but since BCG vaccination is also recommended for healthcare professionals, it is indicated that the activity of swimming can be carried out in the swimming pool or sea provided that a water-proof band/plaster covers the vaccination area and it is immediately removed after swimming (5).

Question 2: Is there a relation between scar formation after BCG vaccination and the efficacy of the vaccine?

No, BCG vaccination (Bacillus of Calmette and Guerin, named after the two physicians who developed the vaccine) can often form a red papule 2-3 weeks after the vaccination, a small ulcer can occur within a few weeks afterwards, and heals leaving a scar. This situation is completely related to normal response to the vaccine and does not require any treatment. There is no need to cover the area with a cream, lotion or bandage during this period. In 15-20% of the cases, papule formation is not seen, and thus ulcer and scar formations do not occur. In 10% of the cases, papule develops but an ulcer does not, and hence a distinctive scar formation does not take place. Therefore, there is no association between scar formation and protectiveness of the vaccine.

Papule or ulcer formation following BCG vaccination takes place at different rates according to the BCG strain used and manufacturing lot. Therefore, while more papule and ulcer formation can be seen in some periods, in some, these can be seen much less.

Mycobacterium bovis, the original strain of BCG vaccine, was developed in 1921 at the Pasteur Institute obtained with attenuation through serial passage of an isolate from a cow with tubercular mastitis. This isolate was then distributed to various laboratories worldwide and a series of new series were developed. Today, 5 main strains, each with different features, are found in more than 90% of the vaccines used worldwide.
The following are among the accepted terminology by the World Health Organization for BCG vaccine strains: Pasteur 1173 P2, Danish 1331, Glaxo 1077 (reproduced from the Danish strain), Tokio 172-1, Russian BCG-I and Moreau RDJ strains (NIBSC ve WHO, 2004).

Each strain has a different allergen and adverse effect profile – it is known that Pasteur 1173 P2 and Danish 1331 strains cause more reactions and adverse effects than Glaxo 1077, Tokio 172-1 or Moreau RDJ strains. In BCG vaccines, live particle concentration in the vaccines changes between 50,000 and 3 million per dosage as regards the strains. There is no standardized BCG vaccine manufacture among BCG vaccine manufacturers. Therefore, it is important to be aware of the fact that different BCG vaccines have different adverse effect profiles and to evaluate these adverse effects including scar formation after BCG vaccination through vaccination safety data (6).

**Question 3:** How can we summarize the licensed age of application of meningococcus vaccines used in clinical practice in our country?

### Private Vaccine Schedules

#### Meningococcal Vaccine Schedule

<table>
<thead>
<tr>
<th>Month/Age</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12-13th month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjugate vaccine containing 4 serogroups</td>
<td>Nimenrix™</td>
<td>1st dose*</td>
<td>2nd dose*</td>
<td></td>
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<td>Booster</td>
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<tr>
<td></td>
<td>Meneveo™</td>
<td>1st dose*</td>
<td>2nd dose*</td>
<td>3rd dose*</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Booster</td>
</tr>
<tr>
<td>Conjugate vaccine containing 1 serogroup</td>
<td>Meneveo™</td>
<td>1st dose**</td>
<td>2nd dose**</td>
<td>3rd dose**</td>
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<td></td>
<td>Booster</td>
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*Recommended Meningococcal Vaccine Schedule*****

<table>
<thead>
<tr>
<th>Month/Age</th>
<th>2</th>
<th>3</th>
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<th>6</th>
<th>7</th>
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<td>1st dose*</td>
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<td>Booster</td>
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<tr>
<td></td>
<td>Menactra™</td>
<td>1st dose***</td>
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<td></td>
<td>Booster</td>
</tr>
<tr>
<td>Conjugate vaccine containing 1 serogroup</td>
<td>Bexsero™</td>
<td>1st dose</td>
<td>2nd dose**</td>
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<td></td>
<td>Booster</td>
</tr>
</tbody>
</table>

*At least 2 months should be left between both doses

**At least 1 month should be left between both doses

***At least 3 months should be left between both doses

****For the babies coming after 4th month, the same schedule is applied by shifting 2 months.

*****For rotavirus vaccines, its first dose should not be left until the 14th week. Also its last dose should not be left until the 32nd week.
References


