What is BCG vaccine?

BCG is a live bacterial vaccine used for the prevention of Tuberculosis

Who should have BCG vaccine?

According to the Immunisation Guidelines for Healthcare workers 2014, BCG is indicated for HCWs aged <35 who are unvaccinated and TST negative, who will have contact with TB patients or with clinically contaminated material.

Not all HCW are at equal risk of TB. A risk assessment should be carried out to see if BCG is indicated for unvaccinated HCWs aged 35 and older who are TST negative, taking into account their country of origin and the nature of their work.(1)

The risks for students is considered low.

University College Dublin is not advising students to have BCG vaccine

Should I have the BCG Vaccine?

To make a decision on this you should study carefully the advantages and disadvantages of the vaccine.

Advantages of BCG vaccination:

- Numerous efficacy trials indicate that BCG has 60-80% protective efficacy against severe forms of tuberculosis in children, particularly meningitis.
- Its efficacy when given to adults against pulmonary diseases varies geographically probably because of previous mycobacteria infection when BCG is given.
- As indicated above BCG vaccine is advised for HCW in the Immunisation guidelines for Ireland. It is also used in the UK

Disadvantages of BCG vaccination:

- BCG has limited effectiveness against TB in adults
- Formation of a scar at the site of the vaccine may occur.
- Abscesses can occur at the site of vaccination which occasionally can be severe.
- BCG vaccination can interfere with the interpretation of the tuberculin test which is used to screen those at risk of infection.
- A positive Tuberculin Skin test which is likely in those who have had the BCG vaccine may result in further tests being required for overseas Medical elective in Canada & the USA. These countries do not use BCG vaccine as a means of controlling infection but rely on early detection and treatment. Students may have issues in being accepted for electives if they have a positive Tuberculin Test or may be obliged to undergo treatment before they are cleared to participate in an elective.

Is BCG vaccine mandatory?

BCG vaccine is not mandatory. It is advised for HCW including students at risk by the Immunisation Guidelines of Ireland. The Medical School after considering the evidence is not currently advising students to have the vaccine.

If I decide to have the vaccine where can I get it?

Not available in Ireland at the moment.

Where can I find more information?

References:

- 1. Immunisation Guidelines for Ireland, Chapter 4 Immunisation and Health Information for Health Care Workers and Others in At Risk Occupations, updated June 2014.
- 2. Frequently asked questions about BCG, Professor P D O Davies, Tuberculosis Research Unit, Liverpool.uk
- 3. Hart PD. Efficacy and applicability of mass BCG vaccination in tuberculosis control BMJ 19677;1:587-592