

Poster 20

Title: Meningococcal vaccination strategy in the Czech Republic

Authors: Pavla Krizova¹; Zuzana Vackova¹; Martin Musilek¹; Zuzana Becvarova¹; Jana Kozakova¹

Institutions: ¹National Institute of Public Health, Prague, Czech Republic

[Description]

Background

A tetravalent conjugate vaccine A, C, Y, W135 for the age above 11 years was launched in October 2010 and for all ages including small infants in autumn 2012. A new MenB vaccine was registered in January 2013. In the Czech Republic, the incidence of invasive meningococcal disease (IMD) is low and meningococcal vaccination is voluntary.

Objectives

To assess the epidemiological situation of IMD in the Czech Republic and to update the guidelines for use of meningococcal vaccines in the Czech Republic.

Methods

The National Reference Laboratory for Meningococcal Infections (NRL) analyses the IMD surveillance data, including molecular characterisation of isolates and produces recommendation for vaccination against meningococcal disease for use by the National Immunisation Committee (NIKO) at Ministry of Health. The NIKO defines vaccination strategy for the Czech Republic and also regularly issues a general national recommendation on vaccination.

Results

The incidence of IMD is currently low in the Czech Republic and there is no indication for mass vaccination. The vaccination strategy against meningococcal infection is based on building long-lasting individual protection and not population immunity. Vaccination is especially recommended for children aged from 2 months to 2 years against serogroup B, administration is preferable not later than at six months of age; children between the ages of 13 and 15 years; adolescents and young adults, in particular before entering university, boarding school and in light of individual risk assessment (participation at music festivals, mass events, stay in a big group); persons travelling or planning a long-term stay in countries with hyperendemic or epidemic situation of meningococcal diseases; patients with underlying diseases; persons professionally exposed to a risk of infection. The incidence of IMD caused by serogroup B dominates in the Czech Republic in recent years and is highest in small infants. Czech isolates of *Neisseria meningitidis* were screened for four antigens involved in the new MenB vaccine by sequencing and Meningococcal antigen typing system (MATS). The new four-component MenB vaccine could protect against a substantial proportion of IMD caused by *N. meningitidis* B in the Czech Republic. A possibility of inclusion of new MenB vaccine into non-mandatory vaccination for all children under one year of age is currently discussed. The guidelines are presented (in Czech) on the website of the Czech Vaccination Society (<http://www.vakcinace.eu/doporuceni-a-stanoviska>) and NIKO (http://www.mzcr.cz/Verejne/dokumenty/doporuceni-ceske-vakcinologicke-spolecnosti-pro-ockovani-proti-invazivnim-mening_8893_1985_5.html). The English version of the guidelines is available on the website of the NRL for Meningococcal Infections (http://www.szu.cz/uploads/IMO/Recommendation_for_vaccination_IMD.pdf).

Conclusions

The vaccination strategy against meningococcal disease is regularly updated in the CR to reflect changes in the epidemiological situation and availability of meningococcal vaccines.

Acknowledgement

Supported by MH CZ - DRO (The National Institute of Public Health– NIPH, 75010330).

Presenter

Name: Pavla Krizova

E-mail: pavla.krizova@szu.cz

Institution National Institute of Public Health, Prague, Czech Republic