

Zostavax® for the prevention of herpes zoster and postherpetic neuralgia. Pilot assessment using the draft HTA Core Model for Rapid Relative Effectiveness Assessment Zechmeister-Koss I

Background

Herpes Zoster (Shingles) primarily occurs in people over 50 years old. The disease is hardly lethal; however, it is often associated with long-term pain (postherpetic neuralgia) and decreased quality of life. Since 2006, a vaccine against Herpes Zoster (Zostavax®) has been licensed for persons aged 50+.

Method

A systematic review on the efficacy and safety of the vaccine was carried out in the form of a cooperation between several European HTA-institutes. The review has been translated into German and adapted with Austrian context information.

Result

On average 50 persons aged 50+ must be vaccinated to prevent one new case of Herpes Zoster. Efficacy in terms of reduced incidence was 50% overall (relative reduction), however it fell considerably with age and was also slightly lower under routine care conditions, in contrast to clinical study results. Whether the vaccine reduces postherpetic neuralgia in all age Groups, in those who develop Herpes Zoster despite vaccination, is unclear. Studies did not show a clinically relevant reduction in pain, and whether activities of daily living or health-related quality of life are improved by the vaccine is unknown, because of lack of evidence. Overall mortality and hospital admissions have not been reduced with the vaccination in the studies. The most common side effects are injection-site related adverse events. They have occurred more frequently in vaccinated people than in the control groups. The risk of developing severe adverse events increases with age and was also higher in vaccinated people, particularly in people over 80 years.

Conclusion

Zostavax reduces Herpes Zoster incidence. Whether patient relevant benefits are achieved (e.g. pain) is currently unclear. Overall mortality and hospital admissions on a population level won't be reduced with vaccination. Because safety data have indicated an increased risk for severe adverse events in people over 80 years of age after vaccination, members of this age group should rigorously weigh the benefits against the risks.

The full German version is available

under

http://eprints.hta.lbg.ac.at/1013/1/DSD_73.pdf