Bivalent meningococcal B vaccine safe, immunogenic

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(HealthDay)—A bivalent meningococcal B vaccine targeting factor H-
binding protein (MenB-FHbp) elicits bactericidal responses against diverse meningococcal B strains after two and three doses in adolescents and young adults, according to a study published in the Dec. 14 issue of the New England Journal of Medicine.

Lars Ostergaard, M.D., Ph.D., from the Aarhus University Hospital in Denmark, and colleagues assessed the safety and immunogenicity of MenB-FHbp among 3,596 adolescents who were randomized to receive MenB-FHbp or hepatitis A virus vaccine and saline, and 3,304 young adults who were randomized to receive MenB-FHbp or saline at baseline, two months, and six months. Serum bactericidal assays that included human complement (hSBAs) were used to assess immunogenicity.

The researchers found that the percentage of adolescents with an increase in the hSBA titer by a factor of four or more against each primary strain varied from 56.0 to 85.3 percent after dose two and from 78.8 to 90.2 percent after dose three, in the modified intention-to-treat population; for young adults the percentages varied from 54.6 to 85.6 percent after dose two and from 78.9 to 89.7 percent after dose three. After doses two and three, the composite responses were 53.7 and 82.7 percent, respectively, in adolescents, and 63.3 and 84.5 percent, respectively, in young adults.

"We found that MenB-FHbp was safe and immunogenic after dose two and dose three," the authors write.

Several authors disclosed financial ties to pharmaceutical companies, including Pfizer, which funded the study. Several authors also reported holding patents and having patents pending.

More information: Abstract/Full Text (subscription or payment may be required)