the whitewater facility during the site visit. All 11 water-related samples taken from the facility were positive for N. fowleri. seropositive subject had non-vaccine type viral shedding. In both seronegative and results. CMV-specific NABs and cell-mediated immune responses (CMI) were measured prior and 1 month after each vaccination, and at months 12 and 18. Serious AEs (SAEs) were assessed up to Month 18. Viral shedding (urine and saliva) were monitored up to Month 12. CMV-directed activity and produce high antibody titre. Moreover, N-terminal region of LD symptoms during spring months. (H: 26.3% vs. NH: 12.6%, P = 0.001) and peripheral neuropathy (OR 0.38, 95% CI: 0.15-0.96, P = 0.03) were significantly different between H and NH: headaches (OR 1.17, 95% CI 1.60–6.59, P = 0.001) and peripheral neuropathy (OR 0.38, 95% CI 0.15-0.96; P = 0.04). Among season-defective CMV, and its replication in culture is controlled by a synthetic chemical. effective in reducing maternal-fetal transmission. V160 is engineered as a replica strategy against anthrax. ID-LFn was generated by overlapping PCR followed by cloning in pET28a. The recombinant protein was then expressed and purified by Ni-NTA chromatography. Reactivity of ID-LFn with anti-PA/LF/EF antibodies was checked by ELISA. Stability was assessed using Circular Dichroism Spectroscopy. The vaccine potential of ID-LFn was evaluated by toxin neutralization assay, lymphocyte proliferation assay, and cytokine analysis. The protection efficacy was analyzed by challenge studies in mice. Results. ID-LFn was found to be significantly stable as compared with protective antigen. Antigen-defective ID-LFn antibodies recognized PA, LF, and EF as well as EF. Though, the total antibody titre, toxin neutralization activity was found to be less than PA but surprisingly, the protection efficacy of ID-LFn was found similar as PA. Conclusion. The ID-LFn vaccine might be second next generation vaccine showing equal protection but higher shelf life as PA with the capability of neutralizing PA, LF as well as EF at the same time. Thus, it may prove an efficient and reliable treatment strategy against anthrax.

Disclosures. All authors: No reported disclosures.

2010. Development of a Novel Anthrax Vaccine Comprising LP-PA Chimera
Emera K. Aggarwal, MD; Vivek Somani, PhD; Rashmi Bhatnagar, PhD; Laboratory of Molecular Biology and Genetic Engineering, School of Biotechnology, Jawaharlal Nehru University, New Delhi, India
Session: 138. Adult Immunization - Miscellaneous
Friday, October 6, 2017: 12:30 PM

Background. Bacillus anthracis (BA), the etiological agent of anthrax, secretes protective antigen (PA), lethal factor (LF), and edema factor (EF) as major virulence factors. Among them, PA based vaccines are most indispensable for providing immunity against BA, but the low shelf life limits its reliability. Previous studies revealed that PA domain IV includes B-cell epitopes designated as ID I, ID II, and ID III; among them, ID I and ID II have been found to possess more toxin neutralization activity and produce high antibody titre. Moreover, N-terminal region of both LF and EF as a binding site of PA by which they are homologous to each other. Here, in this study we have developed and evaluated the vaccine efficacy of chimeric vaccine containing ID I–ID II–ID III region of PA and N-terminal region of LF and EF (ID-LFn).

Materials and Methods. ID-LFn was generated by overlapping PCR followed by cloning in pET28a. The recombinant protein was then expressed and purified by Ni-NTA chromatography. Reactivity of ID-LFn with anti-PA/LF/EF antibodies was checked by ELISA. Stability was assessed using Circular Dichroism Spectroscopy. The vaccine potential of ID-LFn was evaluated by toxin neutralization assay, lymphocyte proliferation assay, and cytokine analysis. The protection efficacy was analyzed by challenge studies in mice. Results. ID-LFn was found to be significantly stable as compared with protective antigen. Antigen-defective ID-LFn antibodies recognized PA, LF, and EF as well as EF. Though, the total antibody titre, toxin neutralization activity was found to be less than PA but surprisingly, the protection efficacy of ID-LFn was found similar as PA. Conclusion. The ID-LFn vaccine might be second next generation vaccine showing equal protection but higher shelf life as PA with the capability of neutralizing PA, LF as well as EF at the same time. Thus, it may prove an efficient and reliable treatment strategy against anthrax.

Disclosures. All authors: No reported disclosures.