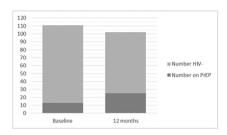
participants (80.6%) returned at 12 months. Of 209 intervention participants at baseline, 176 (84.2%) completed a follow-up survey at 12 months. At baseline, 13 (13.3%) of 98 HIV-negative intervention participants indicated that they were currently taking PrEP. At 12 months, this number grew to 25 (32.5%) of 77 HIV-negative intervention participants, indicating that they were currently taking PrEP. A total of 21 participants reported initiating PrEP during their time in the intervention.



**Conclusion.** PrEP is a valuable biomedical intervention for preventing HIV infection in those at risk. PrEP Chicago, a network intervention designed to promote uptake of PrEP among YBMSM, shows promising results for PrEP adoption among this community.

Disclosures. All authors: No reported disclosures.

## 864. Therapeutic Immunosupression to Treat Rabies Encephalitis

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Session: 86. Pushing the Envelope in CNS Infections Thursday, October 4, 2018: 2:00 PM

**Background.** Rabies is nearly universally fatal with about 60,000 annual deaths globally; <0.1% cases survive. Reports of therapeutic coma leading to survival are outnumbered by reports of failure. On the basis of personal discussions with a leading rabies expert (Dr Rodney Willoughby), we hypothesized that limiting CNS immune response based on CSF antibody titre (ABT) might prove useful. We report on successful use of immunosuppression in 1 patient.

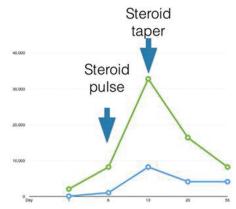
Methods. A 26-year-old male was admitted with 2-day history of flu-like syndrome. He had category III dog bite on face 17 days prior. RIG was not given due to nonavailability; he had received ARV day 0, 3, 7, and 14 on time. On 4th day of admission (day 0), neurological features started—difficulty in walking and diplopia; hydrophobia was noted. Working diagnosis of rabies was made. MRI brain on day 1 showed subtle abnormal T2 and flair hyper intensities in pons, medulla, and left hippocampus. CSF (day 1) showed 105 cells; all lymphocytes. The RFFIT serum and CSF ABTs and rabies PCRs are tabulated below. Since ADEM was a possibility, he was begun on IVIg. Work up for other viral encephalitis was negative. Repeat CSF ABT on day 6 confirmed rabies. Postulating risk of death due to cerebral edema due to CNS immune response, dexamethasone (dexa) 6 mg/kg/day in 4 divided doses was begun on day 8. Serial MRI and CSF were done. Dexa taper was done based on MRI and CSF ABT. Intensive supportive care was given.

**Results.** MRI on day 9 and day 12 showed no cerebral edema. Dexa taper was started from day 13 by half every alternate day; it was given till day 28. By day 17, there was intermittent eye opening, withdrawal to pain and some orofacial and limb movements. Further recovery had waxing and waning course. Now he is nearly 1 year post rabies encephalitis. He is unable to talk or comprehend, but can sit independently and is able to walk with support.

Conclusion. Immunosuppressive therapy with dexa to improve outcomes in rabies seems an exciting option. Optimal dose, time of start, and taper schedule need further studies. CSF ABT-based tapering appears promising. Larger studies with this approach are needed.

Table 1

Day	1	3	6	13	17	20	 55
Serum ABT	2048		8192	32768	16384	16384	8192
CSF ABT	64	X	1024	8192	X	4096	4096
Saliva PCR	Negative (Neg)	X	Neg	X	X	X	X
CSF PCR	Neg	X	Neg	X	Χ	Χ	X
Nuchal biospy	X	Neg	X	X	X	X	X



## Serum (Green) and CSF (Blue) antibody titres

Disclosures. All authors: No reported disclosures.

## $865.\,A can tha moeba$ Disease Associated With the Practice of Nasal Rinsing in Immunocompromised Patients

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**Session:** 86. Pushing the Envelope in CNS Infections *Thursday, October 4, 2018: 2:00 PM* 

Background. The genus Acanthamoeba are free-living amebae found worldwide in water, including tap water, and soil that can cause rare but severe infections of the eye, skin, and central nervous system. Acanthamoeba spp. generally cause disease in immunocompromised persons, including those with HIV, hematologic malignancies, and solid organ transplants. The route of transmission and incubation period are not well known in humans, but animal studies have shown that disease can be produced via the intranasal, intrathecal, and intravenous routes. We describe 5 cases of Acanthamoeba disease among immunocompromised patients who practiced nasal rinsing prior to becoming ill.

*Methods.* The Centers for Disease Control and Prevention (CDC) offers a clinical consultation service for free-living ameba infections and maintains a Free-living Ameba laboratory with confirmatory diagnostic testing capabilities. When an *Acanthamoeba* case is confirmed in the United States, details about the case are collected on a standardized case report form which includes questions about the casepatient's water and soil exposure prior to becoming ill. Questions about nasal rinsing were added to the form in 2011.

**Results.** Five Acanthamoeba case patients in CDC's free-living ameba database were reported to have performed nasal rinsing prior to becoming ill. The median age was 60 years (range 36–73 years) and 3 of 5 patients were female. Two were solid-organ transplant patients (heart and kidney), 2 had chronic lymphocytic leukemia, and 1 had HIV. Three patients presented only with encephalitis and died. The 2-organ transplant patients had a combination of rhinosinusitis, osteomyelitis, and skin lesions. One survived and the other died, the cause of which was unrelated to Acanthamoeba. All reported using tap water to perform nasal rinsing, most for sinus congestion using a neti pot or similar device and one for religious purposes.

Conclusion. Acanthamoeba is an inhabitant of water, including treated tap water. Immunocompromised patients, like those presented here, might be at risk for infections caused by Acanthamoeba transmitted via tap water used for nasal rinsing. Clinicians caring for immunocompromised patients should advise their patients not to use tap water for nasal or sinus rinsing.

**Disclosures.** All authors: No reported disclosures.

866. Increased Diagnosis of Varicella-Zoster Virus Infection of the Central Nervous System With the BioFire FilmArray Meningitis/Encephalitis Panel Lynette Chen, MD, MPH $^1$ ; Matthew Pettengill, PhD, D(ABMM) $^2$ ; Bryan Hess, MD $^1$  and Joseph DeSimone, Jr MD $^1$ , Infectious Disease, Thomas Jefferson University Hospital, Philadelphia, Pennsylvania and  $^2$ Pathology, Anatomy and Cell Biology, Thomas Jefferson University Hospital, Philadelphia, Pennsylvania

Session: 86. Pushing the Envelope in CNS Infections Thursday, October 4, 2018: 2:00 PM

**Background.** Varicella-zoster virus (VZV) infection of the central nervous system (CNS) is relatively uncommon. Diagnostic tests historically utilized culture, serologies, and targeted PCR methods. In April 2016, our institution began