**PRACTICAL PEARL: Lyme Disease**

| Introduction | • Caused by a tick-borne bacteria – *Borrelia burgdorferi*
|             | • Carried by Ixodes ticks, which must be attached and engorged for >36-48 hours to transmit disease
|             | Phases of disease include:
|             | • Early: classic erythema migraines (EM) rash with low grade fevers, headache.
|             | • Later: disseminated rash or arthritis, meningitis, or carditis.
|             | • Chronic pain and fatigue after Lyme disease treatment are rare in children; *no benefit to additional antibiotic treatment*. AAP Red Book 2018, ed 31st pg 515-523

| Initial Evaluation and Management by Primary Care | • If history of tick exposure and expanding erythematous macular rash consistent with EM, then Rx for Lyme disease should be considered without serologic testing.
|                                                     | • Consider serology (C6 antibody) for Lyme disease if a child has evidence of tick exposure and more advanced symptoms, such as arthritis or other later stage manifestations.
|                                                     | • Provide anticipatory guidance for prevention of Lyme disease and other tick-borne infections such as insect repellents, outdoor clothing with long sleeves, tick “checks” and removal techniques. NO testing of the tick is recommended!
|                                                     | • Tick bite prophylaxis with one dose of oral doxycycline for a tick attached >36 hrs was approved for all pediatric patients in 2018
|                                                     | Reference:
|                                                     | CDC site [http://www.cdc.gov/lyme/prev/](http://www.cdc.gov/lyme/prev/)
|                                                     | [https://www.cdc.gov/ticks/tickborneDiseases/tick-bite-prophylaxis.html](https://www.cdc.gov/ticks/tickborneDiseases/tick-bite-prophylaxis.html)

| When to Refer | • Questions about diagnosis, testing for co-infections with other tick-borne pathogens, optimal antimicrobial selection and treatment course
|              | • Recurrent symptoms in a previously treated patient

| How to Refer | • 794-KIDS – Request Pediatric Infectious Diseases appointments
|             | • For more urgent access, please call the Pedi ID doctor on call

| What to Expect From Baystate Children’s Hospital Visit | • Current patient information and pertinent medical records from the primary care office will be requested prior to the visit for review
|                                                      | • Due to the nature of some patients’ symptoms, other referrals, such as orthopedics, rheumatology or possible inpatient admission for additional evaluation and treatment may be recommended