



# Treatment Presentation

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# Disclosure:

No relationship with  
commercial interests

I, Neil Rellosa, do not have relationships with  
commercial interests.

and

I, Elizabeth Maloney, do not have relationships  
with commercial interests

*A commercial interest is any entity producing,  
marketing, re-selling or distributing health care  
goods or services, consumed by, or used on,  
patients.*

# Presentation Goals

- Collegial discussion of therapeutic approaches
  - Acknowledges the need for stronger clinical data
  - Recognizes the validity of different clinical perspectives
    - Impact of clinical perspective on treatment choices

# Philosophical Approaches

## **IDSA/AAN/ACR**

- Evidence-based, multidisciplinary approach
- Targeting prevention, diagnosis and treatment of Lyme disease
- Addresses complications and co-infection with other tick-borne pathogens
- Intended audience primary care physicians and specialists caring for this condition

## **ILADS**

- Prevent disease whenever possible
- Avoid disease progression
- Reduce the morbidity associated with persistent manifestations; improving the patient's QoL
- Individualizing risk/benefit assessment; engage in informed shared decision-making
- Exercise clinical judgment

# What to do for an asymptomatic tick bite?

## IDSA/AAN/ACR

- Tick identification
- New bite = in last 72 hrs
- $\geq 36$  hrs of attachment
- Single dose of doxycycline
  - 200mg
  - 4.4 mg/kg for children

## ILADS

- New bite = in last 48-72 hrs
- Any evidence of feeding
- 20d of doxycycline
- Patient to report symptoms of tick-borne disease, if they occur

# What is the difference between a recent (1-3 days) asymptomatic and symptomatic tick bite?

## **IDSA/AAN/ACR**

- Asymptomatic- watch & wait vs. prophylaxis
- No diagnostic testing for asymptomatic
- Against testing of tick
- Symptomatic- treat if consistent with known Lyme symptoms

## **ILADS**

- Asymptomatic – prophylaxis
- Symptomatic – treat for Lyme
- No diagnostic testing for asymptomatic



# What to do if tick bite was 5 days ago?

## **IDSA/AAN/ACR**

- Beyond window for prophylaxis
- Watchful waiting if asymptomatic
- No diagnostic testing if asymptomatic
- Treat for early disease if symptomatic

## **ILADS**

- Beyond window for prophylaxis; no official position
- Watchful waiting if asymptomatic
- No diagnostic testing if asymptomatic
- Treat for early disease if symptomatic

# What to do for a recent tick bite with EM rash or flu-like symptoms?

## **IDSA/AAN/ACR**

- Treat for early Lyme disease
- 1<sup>st</sup> line agents:
  - Doxy-10 days
  - Amox & cefuroxime-14 days
- 2<sup>nd</sup> line: azithromycin-7 days

## **ILADS**

- Treat for early Lyme disease
- 1<sup>st</sup> line agents (doxy, amox, cefuroxime) for 4-6 wks; probiotics
  - 3 wks of azithromycin
- Follow-up at end of therapy
- Extend Rx if not fully recovered



# What should I do if the EM is only 4cm?

## **IDSA/AAN/ACR**

- No established size cut-off
- Lesion should be consistent with EM
- Treat for early Lyme

## **ILADS**

- Treat for early Lyme
- EM size cut-off is arbitrary;
  - Meant for surveillance case definition

# What is the duration of therapy for patients with EM rashes? Does it change if the patient is very symptomatic?

## **IDSA/AAN/ACR**

- Uncomplicated EM: 10-14 days depending on medication
- Neuro (facial palsy/meningitis)- 14 days
- Carditis/AV block- 14-21 days
- Arthritis- 28 days

## **ILADS**

- Uncomplicated EM: 4 wks
- Neuro symptoms or severe illness: 6 wks
- F/u and extending Rx as before

# What should I do for multiple EM rashes?

## **IDSA/AAN/ACR**

- No difference between single EM vs multiple EM rash
- Uncomplicated EM: 10-14 days depending on medication

## **ILADS**

- Disseminated disease: 6 wks
- Close f/u; extend to ensure full recovery

# What should I do for patients who remain ill after finishing a course of antibiotic?

## **IDSA/AAN/ACR**

- Consider alternate diagnosis
- For partial response arthritis, recommendation for 2<sup>nd</sup> course vs observation
- For minimal or no response arthritis, 2-4 weeks of IV ceftriaxone
- Post-antibiotic arthritis: Referral to Rheum/anti-rheumatic or anti-inflammatory agents

## **ILADS**

- Discuss pros/cons of retreatment
- Prior to retreatment
  - Reassess dx; eval for other diseases
  - Define therapeutic trial parameters for individual
- 4-6 wks of antibiotics; probiotics

# What should I do for patients who remain ill after finishing a course of antibiotic? (cont.)

## **IDSA/AAN/ACR**

- For non-arthritis manifestations, recommend against additional antibiotic therapy
- Symptom-based treatments

## **ILADS**

- Reassess after initial retreatment
  - Response to Rx
  - Potential for other diagnoses
- Modification/stopping based on several factors

# When to suspect other tickborne infections?

## IDSA/AAN/ACR

- Clinical picture not consistent with Lyme disease but known tick bite/exposure
  - More severe illness (hematologic abnormalities, toxic/septic like picture etc.)
- Partial/no response to Lyme treatment
- For co-infection (babesiosis, anaplasmosis), high-grade or persistent fever or abnormal labs (thrombocytopenia, leukopenia, neutropenia or anemia, evidence of hemolysis, indirect hyperbilirubinemia, or LDH)

## ILADS

- When clinical picture looks like Lyme+
- Partial/no response to Lyme treatment





Thank you