'Natural Therapeutic Interventions for Patients with Chronic Infection'

Philip Kielman, Pharmacist

8th March 2015
AONM Conference
London, UK
Content

1. Some Infectious Pathogens Underlying Chronic Infection
2. Therapies
3. Studies
4. Conclusions
5. Questions
'Some Infectious Pathogens Underlying Chronic Infection'
- Patogens and coïnfecions
- Toxins
- Immune system
- Other(s)
LYME-BORRELIOSIS: CO-INFECTIONS

- Borrelia (bacteria)
- Babesia (protozoa)
- Ehrlichia (rickettsia)
- Bartonella (bacteria)
- Mycoplasma (L-form)
- Viruses (specific CMV, EBV)
THERAPIES
Medical management

- The oral antibiotics doxycycline, amoxicillin or cefuroxime axetil are recommended for 2 weeks (range 10 to 21 days) for erythema migrans. Facial palsy and other complications need longer treatment (3 to 4 weeks).

- The usual adult doses of these antibiotics are:
  - doxycycline 100mg twice daily
  - amoxicillin 500mg three times daily
  - cefuroxime axetil 500mg twice daily.

Source: Public Health England website
Traditional / Conventional Treatment

The traditional / conventional treatment for Lyme disease are pharmaceutical antibiotics such as:

- Doxycycline
- Minocycline
- Clarithromycin
- Penicillin G
- Ceftriaxone.

Treatment Guidelines
ILADS 2008

The ILADS treatment guidelines for Lyme Disease are:

- pharmaceutical antibiotics
- nutritional therapies

General consensus/guidance of NHG and ILADS
Borrelia burgdorferi develops granules & cysts when exposed to antibiotics.


Kersten A; Poitschek; Rauch S.; Aberer E. 1995
CAM treatments
CAM treatments

- Natural antibiotics against Borrelia
- Treatment of co-infections: viruses, fungi, parasites, bacteria
- Detoxification from toxins and Herxheimer reactions
- Enhancement of the immune system
- Other
Why CAM treatment(s)

1. Antibiotics can kill off friendly bacteria in the gut and allow overgrowth of fungi and other ‘bad’ bacteria
2. Can become resistant to antibiotics
3. Bacteria change form into cysts which ‘hide’ from antibiotics

- Various protocols available:
  - The Klinghardt Protocol
  - The Buhner Protocol
  - The Cowden Protocol
ILADS Supportive Therapy – Nutritional Supplements (Part 1)

1. Probiotics
2. Multivitamin
3. CoQ10
4. Alpha Lipoic Acid
5. Vitamin B
6. Magnesium
7. Essential Fatty Acids
8. NT-Factor

For Neurologic Symptoms
1. Acetyl-L-Carnitine
2. Methylcobalamin (Methyl B12)

Source:
http://www.ilads.org/lyme/B_guidelines_12_17_08.pdf
ILADS Supportive Therapy – Nutritional Supplements (Part 2)

- **Immune Support**
  1. “Reishi Max”
  2. Transfer Factors

- **Joint Symptoms**
  1. Glucosamine
  2. Vitamin C
  3. Flex Cream

Source:
http://www.ilads.org/lyme/B_guidelines_12_17_08.pdf
CAM treatments

Natural treatments against Borrelia

- TOA-free Cat’s Claw
- Otoba sp. (anti bacterial)
- Teasel
- Ozone therapy
- Biophoton therapy or zappers
EXPLANATION of the EFFICACY of TOA-free Cat’s Claw

- Pentacyclic Oxindole Alkaloids
  stimulation and modulation of the immune system

- Quinovic acid glycosides
  antiviral and antibacterial

- Triterpenes
  antiviral, anti-inflammatory, anti-allergic
  stimulation of T-killer cells

- Antioxidants, polyphenols, proanthocyanidins
  support the immune system and reduce the free radical load
Sapi Study

In vitro effectiveness of Samento and Banderol on different forms of Borrelia burgdorferi

Datara Akshita B.S., Kaur Navroop M.S., Luecke David F B.S., Madri Shilpa B.S., Sapi Eva Ph.D

Lyme Disease Research Group, Department of Biology and Environmental Sciences, University of New Haven, CT 06516

Introduction

Borrelia burgdorferi (Bb) a spirochete bacteria, has the ability to adopt different inactive forms, such as cystic form and colon-like aggregates both in vivo and in vitro, in presence of unfavorable conditions such as exposure to antibiotics, commonly used for treating Lyme borreliosis. Unfortunately, when Bb is in these inactive forms, conventional antibiotic therapy will not destroy the bacteria. The frontline treatment for chronic Lyme disease is administration of tetracyclines (e.g. doxycycline) or macrolides (e.g clindamycin). However, even after 3 months of treatment with these drugs, only a 50-60% improvement rate is observed in patients, with a cure rate of only 20-35%. Besides this, the conventional antibiotic treatment for Lyme disease has several disadvantages including relapse of disease, high treatment cost and extremely prolonged side-effects.

An alternative treatment approach, called Cowden’s protocol, is a botanical treatment and is gaining wide use. This protocol has been in clinical use since 2008 and Dr. Richard Horowitz has shown clinical success using Cowden’s protocol, with 70% improvement, which is significantly higher than the previous clinical trials on antibiotic agents. The two natural antibiotics from the Cowden’s protocol selected for this study are Samento (also known as Cat’s Claw: Uncaria tomentosa), having antibacterial and antifungal properties, and Banderol (Ostrea sp.) known to be antibacterial, anti-protocol and anti-inflammatory, both of which are used simultaneously during the first two months of Cowden’s protocol. In this project, we tested these natural antibiotics, to study their effect on active, cyst and biofilm forms of Bb.

Material and Methods

This study was performed using Bb (ATCC 23283). Bb was cultured in BSK-H complete media, supplemented with 6% rabbit serum (Sigma 86023). Cells were taken as the culture monomer for biofilm formation, the culture was incubated in shaking incubator at 33°C for 24 hours.

A wide range of concentrations of these herbal agents were initially tested to determine an effective concentration. Then, to assess the in vivo viability of Bb, cultures exposed to Samento, Banderol and their combination at the selected concentration after 2 weeks, direct cell counting was using a 10 μm bacterial counting chamber (Pavlo-Hausser 3501) was performed to determine the effect on spirochete and biofilm forms. Fluorescent microscopic technique using LIVE/DEAD BacLight Bacterial Viability Kit (invitrogen 7012) was performed to visualize biofilm formation. Thus, the effectiveness of Samento, Banderol and their combination on spirochete, cyst and biofilm forms of Bb was measured.

Results

After testing wide range of concentrations of Samento, Banderol and their combination, 300 μl solution worked best against the spirochete and cyst forms of Bb (Figure 1) and this concentration was chosen for further study. Throughout the study, ethanol control was also used because these herbal extracts contain 20%-25% ethanol. The results from direct cell counting method showed significant reduction in the spirochete population, but not the cyst form, after 2 week exposure to Samento, Banderol and their combination (Figure 2). If compared to the most common antibiotic for Lyme disease treatment, doxycycline (250 μg/ml), it was observed that though doxycycline is very effective against the spirochete form, these natural antibiotics indeed have comparable effects. Furthermore, the combination of Samento and Banderol works even better than doxycycline for spirochete form (Figure 3A). Also, doxycycline treatment induces more cyst formation as compared to Samento, Banderol or its combination (Figure 3B). The BacLight staining helped to visualize the effects after treatment (Figure 4). The green fluorescent stain (having excitation/emission maxima of about 490/515 nm) stains healthy bacteria with intact membranes, thus staining live cells, and the red dye (having excitation/emission maxima of about 580/605 nm) stains bacteria with damaged membranes, by displacing the green dye, thus staining dead cells.

Samento and Banderol seem to be effective against the spirochete and cyst forms of Bb, however further research is required to determine their effect on the biofilm form.

Conclusions

In summary, 2 week in vitro treatment of Samento and Banderol is capable of eliminating spirochete and cyst forms as seen by the direct cell counting method. Cowden’s protocol uses these natural antibiotics daily for two month, suggesting that they probably help to significantly eliminate spirochete and cyst. Our data supports the clinical success shown by Lyme disease patients who are on Cowden’s protocol. The effect of Samento and Banderol on Bb biofilm is currently under further study and combinations of these natural antibiotics with Serpentase (a proteolytic enzyme, used throughout the 6 months in Cowden’s protocol) are being performed. Early data shows promising results with combination of Samento, Banderol and Serpentase.

Our novel study is to find potential alternative clinical treatment options for Lyme disease patients which would address all forms of Bb.

References


Acknowledgements

We are grateful to the University of New Haven and the Turn the Corner Foundation for all their support.
CAM Co-infections

- Treatment of co-infections
  viruses, fungi, parasites, bacteria
  - Oregano / Quercetin / Curcumin complex: broad spectrum
  - Epigenar / para-epi / vir. / bact. = ozonated castor oil
  - Probiotics like Symprove®
  - L-Lysine (viruses); L-Cysteine (parasites)
Viruses like Epstein-Barr (EBV)

- L-Lysine: 500mg 6 caps a day
- Vitamin D / Vitamin K2: 1000iu
- Vitamin C: 3000mg
- Cistus Incanus
Parasites

- Black walnut, Clove & Eucalyptus oil (Hulda Clarke)
- Para-epi
- L-cysteine
- Metronidazole (Flagyl®)
Fungi

- Sugar-free diet
- Probiotics
- Cumanda
- Grapeseed extract
- Garlic
- Pau d’Arco

- Miconazole (Daktarin® oral gel)
Herxheimer reaction

The killing of toxin-producing microorganisms allows toxins into the body and while therapy is used to get better, one feels worse temporarily.

This was first described by the German physician Karl Herxheimer.
CAM detox support

- **Detoxification** and Herxheimer reaction
  - Burbur-detox, Green Magma, Milk thistle, Green clay, Curcuma + Quebra pedra

  - Desmodium molliculum stimulates the liver / kidneys and lymph
  - Milk thistle supports the liver function
  - Green clay binds lipoproteins in gut
  - Curcuma and Quebra pedra support the liver and gallbladder
Other CAM Treatments

- Coenzyme-Q10, Acetylcarnitine, Vit-C, Magnesium malate, Serrapeptase, Curcuma complex, Cistus incanus, etc.

  - Energizers: Q10 and Acetyl L-carnitine
  - Magnesium because Borrelia uses Mg
  - HPU Glutathione for HPU and neg. lyme test
  - Cistus incanus / serrapeptase for biofilm and cysts
  - L-Glutamine acid for Gut; Enzyme complex
Immune system

- TOA-free cat’s claw
- Echinacea
- Astragalus
- Curcumin / Garlic
- Mushrooms (Maitake / Reishi)
- Vitamins and minerals
- Lifestyle (rest / sleep / diet / stress)
Pilot study: TOA-free Cat’s Claw for Lyme Disease

**Principle Investigators:**

- William Lee Cowden M.D.
- Joan Vandergriff N.D.
- Hamid Moayad D.O.
- Luis Romero M.D.
- Svetlana Ivanova M.D. Ph.D.

**Research Sponsors:**

- NutraMedix, LLC (Jupiter, Florida)
- Nature’s Sunshine Products (Provo, Utah)
Structure of the Pilot Study

- 28 Stage 3 Lyme patients began the study
- 14 “control” patients continued using conventional therapy during the study
- 13 out of 14 patients in the “complementary” treatment group completed the study (1 dropped out because of cancer surgery)
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Number of Persons with Symptoms</th>
<th>Improvement %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Study</td>
<td>Wk.10 of Study</td>
</tr>
<tr>
<td></td>
<td># Improved</td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td>13/13</td>
<td>12/13</td>
</tr>
<tr>
<td>Stomach Pain</td>
<td>10/13</td>
<td>10/10</td>
</tr>
<tr>
<td>Joint Pain</td>
<td>8/13</td>
<td>7/8</td>
</tr>
<tr>
<td>Memory Problems</td>
<td>9/13</td>
<td>8/9</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>7/13</td>
<td>7/7</td>
</tr>
<tr>
<td>Visual Disturbances</td>
<td>5/13</td>
<td>4/5</td>
</tr>
<tr>
<td>Emotional Instability</td>
<td>5/13</td>
<td>4/5</td>
</tr>
<tr>
<td>Peripheral Neuropathy</td>
<td>5/13</td>
<td>5/5</td>
</tr>
<tr>
<td>Insomnia</td>
<td>4/13</td>
<td>3/4</td>
</tr>
</tbody>
</table>
# Cowden Support Program

<table>
<thead>
<tr>
<th>Day</th>
<th>30min Before Breakfast</th>
<th>Dosage</th>
<th>30min Before Lunch</th>
<th>Dosage</th>
<th>30min Before Supper</th>
<th>Dosage</th>
<th>At Bedtime</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Banderol 1 drop, Burbur 10 drops, Magnesium 2 caps, Serrapeptase 1 cap</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Banderol 3 drops, Burbur 10 drops, Magnesium 2 caps, Serrapeptase 1 cap</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Banderol 5 drops, Burbur 10 drops, Magnesium 2 caps, Serrapeptase 1 cap</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Banderol 7 drops, Burbur 10 drops, Magnesium 2 caps, Serrapeptase 1 cap</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
<td>Burbur 10 drops, Pinella 10 drops</td>
<td></td>
</tr>
</tbody>
</table>

Note: This protocol is not effective unless you are drinking 3 liters (quarts) of water throughout the day.
Results

- **Double blind period (3 months)**

![Graph showing symptom levels over 3 months for Samento and Placebo groups.](image-url)
How can people start easily?
LYME DISEASE TREATMENT SCHEDULE

PREVENTION (possibly “infected tick”)
Samento 3 times per day 7 drops (or 2 x 10), for 15 days

ACUTE LYME (“bull’s eye”, or symptoms)
Samento  twice a day 15 drops, for 60 days (Herxheimer reaction?)

CHRONIC LYME
Building schedule:
  - Samento twice a day 1 drop
  - increase with 1 drop per week till twice a day 15 drops
  - alternating: 12,5 days Samento, 1,5 day not; 6-9 months
  - similar with Banderol, then alternate (2x20 dr.)

Supporting: Cumanda (co-infections) 2x20 dr.; detoxification Burbur-detox (4x10 dr.)
Protocols

- Detox
- Microbes: bacteria / fungi / virus / parasite
- Immune system
- Other
CONCLUSIONS
Conclusions

- Lyme & associated diseases: accurate diagnosis is essential
- Antibiotic treatment +/-
- CAM treatment(s)
- Research and studies
- Individual treatment!
QUESTIONS?

Thank you for your attention