Free Paper Presentation 3 – Parasitic/Gastro-intestinal Infections

OL-013 Imported bancroftian filariasis: diethylcarbamazine response and benzimidazole susceptibility of *Wuchereria bancrofti* in dynamic cross-border migrant population targeted for the national program to eliminate lymphatic filariasis in Southern Thailand

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**Background:** Imported bancroftian filariasis (IBF) caused by *Wuchereria bancrofti* (Wb) in cross border Myanmar migrant workers has been targeted for multidose diethylcarbamazine (DEC) mass treatment as part of the lymphatic filariasis elimination program at different health settings in permitted provinces. Regarding their health-seeking behaviors and migration patterns, the IBF was scrutinized for a 300mg single-dose DEC response and benzimidazole-susceptible parasite inhabiting Myanmar carriers in southern Thailand.

**Methods:** Of the 1,133 Myanmarrs: DEC experienced long-term migrants significantly outnumbering those short-term migrants were examined for microfilaria (WbMf) and antigenemia (WbAg), parasite loads of 14 DEC-treated antigenemic cases: the same 7 microfilaric and amicrofilaric were monitored at month 0, 1, 2 and 3 to signify DEC treatment effects on infection intensity reduction. PCR and sequencing of *β*-tubulin gene retailed in 7 WbMf isolates were performed to analyze two discrete exons linked with benzimidazole selection: 141bp (Phe167Tyr) and 174bp amplics (Phe200Tyr).

**Results:** Significant 3-month antigen load reduction between the groups was pronounced (Table 1). In microfilaric group, Mf density rebounded up to pretreatment level whereas parasite load (WbMf and WbAg) reduction did not correlate with time. Sequence analysis revealed homology of the fragments (Fig. 1) of the filarial orthologs, which neither point mutation at position Phe167Tyr and Phe200Tyr was detected.

**Conclusion:** The IBF predominantly susceptible to benzimidazole was sensitive to DEC that is still a best-buy public health intervention for large-scale controlling its burden in Thailand but required for both countries important vigilance of the refugia parasite.

**Table 1. Serological response to a 300 mg single oral-dose DEC in the W. bancrofti antigenemic subjects, before and after treatment (months)**

<table>
<thead>
<tr>
<th>Group</th>
<th>P. P. T.</th>
<th>GM Ag load (AU/ml)</th>
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<tbody>
<tr>
<td>MF+/-Ag+ (n=7)</td>
<td>137090</td>
<td>121663</td>
</tr>
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<td>MF+/-Ag+ (n=7)</td>
<td>137090</td>
<td>121663</td>
</tr>
<tr>
<td>Total antigenemics (n=14)</td>
<td>107630</td>
<td>93567</td>
</tr>
</tbody>
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**Fig. 1 Agarose gel electrophoresis of human and W. bancrofti β-tubulin gene amplification.** A representative MF+/Ag+ DNA template shows a nested PCR pattern with the Wbstubb primers: lane 1, 607-bp amplicons of the 1st round PCR; lanes 2 and 3, 141 and 174 bp amplicons of the 2nd round PCR; lane 5, no gDNA; lane M, the 100-bp DNA ladder as molecular weight marker. A 210-bp fragment confined in lane 4 was yielded by following a single PCR instead using the Hs tubb primers. Two latter exons (Gly132 to Lys174, Val1175 to Leu228) were 98-100% homologous to putative conserved domain of the filarial orthologs, which neither point mutation at position Phe167Tyr nor Phe200Tyr was detected.

OL-014 Nifuroxazide in the treatment of patients with giardiasis in the Russia

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**Objective:** To substantiate the necessity of application of drugs with minimal resorptive and toxic effects in treatment of children with giardiasis and evaluate the clinical efficacy of nifuroxazide. A clinical trial was carried out in 1098 children (aged 1-18 years) with giardiasis. We analyzed cause-and-effect relationships between the parameters of biochemical, immunological, hormonal homeostasis and the level of xenobiotic load. The study detected adverse effects of xenobiotics (manganese, lead, nickel, chromium, acetaldehyde, formaldehyde, acetone, etc.) on the liver function of detoxication, their ability to cause the immune system disorders and tension of the humoral status. To efficiently eradicate the causative agent the authors applied nifuroxazide ("Enterofuril" Bosnalijek) with no resorptive effect. 38 children received enterosorbents, cholagogues and nifuroxazide ("Enterofuril" Bosnalijek) at doses of 100-200 mg as a suspension (liquid) 4 times per day (depending on age) for 7 days. Check analyses of stool samples were performed in 3-7 days after treatment. The application of nifuroxazide lead to 100% eradication of the parasite, no side effects were observed in the children. The application of nifuroxazide in patients with giardiasis living under conditions of high risk of bioma’s contamination by industrial toxicants is pathogenetically substantiated. Nifuroxazide has a significant eradication ability.

OL-015 A randomized open-label clinical trial with Levofloxacin, Omeprazole, Alinia (nitazoxanide), and Doxycycline (LOAD) versus Lansoprazole, Amoxicillin and Clarithromycin (LAC) in the treatment naive *Helicobacter pylori* population

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**Introduction:** Helicobacter pylori (HP) gastritis is a global threat for gastric carcinoma. We evaluated Levofloxacin, Omeprazole, Alinia (nitazoxanide) and Doxycycline (LOAD) versus Lansoprazole, Amoxicillin and Clarithromycin (LAC) in treatment naive HP population.

**Methods:** 135 patients with HP gastritis or peptic ulcers were enrolled. Age: 18-65 years; Male - 75 (55.55%), female - 60