ENLIST – The formation and aims of the ENL International STudy Group

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ENLIST

• Definitions of enlist:
• To engage or secure (a person, his services, or his support) for a venture, cause, etc.
• To enter into or join an enterprise, cause, etc.
• To participate heartily (as in a cause or drive)
Introduction

- ENL is a debilitating multisystem disorder characterised by fever, malaise and painful erythematous cutaneous nodules.
- ENL may occur before, during or after completion of multi-drug therapy (MDT)
- ENL is often recurrent or chronic in nature.
- There are few prospective data concerning the features of ENL and treatment using prednisolone
CAUSES OF DEATH OF LEPROSY PATIENTS
INFLUENCE OF LEPTA REACTIONS AND RENAL DISEASE

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AND JORGE G. MASANTI, M.D.
Sanatorio Baldomero Sommer
Buenos Aires, Argentina

**Table 1.**—Average age at death of the groups of patients studied.

<table>
<thead>
<tr>
<th>Patient group</th>
<th>No. of cases</th>
<th>Arithmetic mean</th>
<th>Grouped series method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonlepromatous, total</td>
<td>35</td>
<td>67y.6m.</td>
<td>66y.5m.±11y.</td>
</tr>
<tr>
<td>Males</td>
<td>18</td>
<td>—</td>
<td>67y.2m.±11y.</td>
</tr>
<tr>
<td>Females</td>
<td>17</td>
<td>—</td>
<td>65y.7m.±10y.6m.</td>
</tr>
<tr>
<td>Lepromatous, total</td>
<td>463</td>
<td>54y.</td>
<td>51y.9m.±15y.6m.</td>
</tr>
<tr>
<td>With reactions</td>
<td>208</td>
<td>49y.3m.</td>
<td>47y.7m.±15y.1m.</td>
</tr>
<tr>
<td>Without reactions</td>
<td>255</td>
<td>57y.8m.</td>
<td>55y.3m.±13y.1m.</td>
</tr>
</tbody>
</table>

Background

- ENL is a neglected complication of a neglected tropical disease
- Cochrane Review by van Veen et al
- Clofazimine is not always available
- Thalidomide is not always available
- Thalidomide use is restricted to males in some countries
- No consensus on how to use thalidomide
- Thalidomide expense

- O-067 There is significant mortality associated with erythema nodosum leprosum (ENL) at ALERT hospital, Ethiopia – a five year retrospective study. SL Walker, E Lebas, SN Doni, SM Lambert
- O-070 Comparative efficacy of four treatment regimens in Type 2 leprosy reactions. HK Kar, L Gupta
- O-0128 Thalidomide use in Brazil. MA Pontes, HS Goncalves, PC Almeida
- O-165 RCT assessing ciclosporin in ENL reaction treatment in Ethiopia. D Lockwood, SM Lambert, P Nicholls et al.
- P-163 A systematic review on the epidemiological data of erythema nodosum leprosum
<table>
<thead>
<tr>
<th>Study</th>
<th>Intervention</th>
<th>Number</th>
<th>Recurrence rate</th>
<th>Adverse events</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girdhar(^{37})</td>
<td>Intravenous betamethasone versus placebo and oral steroids</td>
<td>10</td>
<td>Unclear</td>
<td>No significant differences reported</td>
<td>Authors reported no benefit of intravenous therapy No females.</td>
</tr>
<tr>
<td>Villahermosa(^{38})</td>
<td>Thalidomide</td>
<td>22</td>
<td>95% recurred within 8 weeks</td>
<td>68%</td>
<td>Neuritis excluded 6 females.</td>
</tr>
<tr>
<td>Sales(^{39})</td>
<td>Thalidomide versus pentoxifylline</td>
<td>44</td>
<td>Not reported</td>
<td>25% by day 7</td>
<td>Neuritis excluded.</td>
</tr>
<tr>
<td>Kaur(^{28})</td>
<td>Thalidomide versus prednisolone</td>
<td>60</td>
<td>Thalidomide 6%. Prednisolone 25% at a dose of 10 mg</td>
<td>Thalidomide &gt; 30%. Prednisolone more than thalidomide.</td>
<td>Neuritis excluded. No blinding.</td>
</tr>
</tbody>
</table>
INFIR ILEP Co-ordinated Programme of Research on Nerve Function Impairment and Reactions in Leprosy

Expert workshop 1997 identified priorities

Funding: Follereau Foundation of Luxembourg, LEPRA, Leprosy Mission International

Various studies
- **Cohort Study**
- **Pilot studies of azathioprine and ciclosporin for Type 1 reaction**
- **Workshop on repeated and late reactions**
- **Studies of delay in detection and starting treatment**

Successful and productive initiative
- 9 publications of original research from the Cohort Study
WORKSHOP REPORT

International workshop on erythema nodosum leprosum (ENL) – consensus report; the formation of ENLIST, the ENL International STudy Group

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Aims

• The ENLIST Group aims to improve:
  – the understanding of the mechanisms which cause ENL
  – the evidence to guide treatment decisions
  – access to effective treatments.
Research priorities

• Natural history
• Validate a severity scale
• Identify risk factors and predictors for the development of ENL
• ENL pathogenesis studies
• Agree outcome measures for RCTs
• Second line drugs – steroid sparing agents and alternatives to thalidomide
• ENL monitoring tools
• Centres:
  – Brazil – Fiocruz, Rio de Janeiro
  – Ethiopia – ALERT Center, Addis Ababa
  – India – Bombay Leprosy Project, Mumbai and TLM Hospital, Purulia
  – Nepal – Anandaban Hospital, Kathmandu
  – Philippines – Leonard Wood Memorial Centre, Cebu
  – United Kingdom – Hospital for Tropical Diseases, London

• Individuals diagnosed with their first episode of ENL, a new episode of ENL or a deterioration of their ENL

• Using standardized definitions and a data collection form demographic, clinical and laboratory data

• The physician determined severity of ENL and the treatment administered were recorded.

• Four poster presentations here at the ILC- P-358,P-359, P-360, P-361
Erythema Nodosum Leprosum International Study (ENLIST) Group – collaborating centres

- London School of Hygiene and Tropical Medicine
  United Kingdom
- Anandaban Hospital
  Kathmandu
  Nepal
- Leonard Wood Memorial Center
  Cebu
  Philippines
- Purulia Leprosy Mission
  West Bengal
  India
- Instituto Lauro de Souza Lima
  Bauru
  Sao Paolo
  Brazil
- Oswaldo Cruz
  Rio de Janeiro
  Brazil
- ALERT/AHRI
  Addis Ababa
  Ethiopia
- Bombay Leprosy Project
  Mumbai, India
- Leprosy Mission RC
  New Delhi, India
Pre-Congress meeting

- Sunday 15th September 2013
- Presentations of ENLIST 1 data
- Analysis of pooled data
- Future research areas
- Funding avenues
Funding

- American Leprosy Missions has supported the two meetings
Potential Future Projects

• QoL studies
• Mental health impact
• Economic impact studies
• Severity scale validation studies
• Comparative outcome studies
• Clinical trials
• Pathogenesis studies
• Genetic susceptibility studies
• Biomarker studies
References and acknowledgements

References


ENLIST Group and workshop participants


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