SToP Trial: Assessing Impetigo and Scabies in Remote Aboriginal Communities

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Motivation

<table>
<thead>
<tr>
<th>Scabies*</th>
<th>Crusted Scabies</th>
<th>Tinea</th>
<th>Insect Bites</th>
<th>Head Lice</th>
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<tbody>
<tr>
<td><strong>Group A Strain (GAS)</strong> and S. Aureus Impetigo</td>
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- **GAS Sepsis**
- **S. aureus sepsis**
- **GAS Glomerulonephritis**
- **GAS RHD**
- **Chronic renal disease**
- **Rheumatic Heart Disease**

Adapted from Fig. 1, Complications of skin infections in Australian Indigenous people, National Healthy Skin Guidelines, 1st ed.

- Estimated 47% of Aboriginal children suffer from impetigo (skin sores) at any one time.
- Inequitable burden of impetigo and Strep A diseases on Aboriginal children is attributed to poor environmental conditions, lack of access to health care services, and cultural normalization.

Background

- Aims to reduce prevalence of impetigo in school aged children 5-9 years old by 50%
- Secondary objective: to document impact of reduced skin infection burden on other health indicators, as measured by reduction in prevalence of scabies.
- Nine remote Aboriginal communities in the Kimberley region arranged into four clusters each with 84 expected participants (n=336) in a cluster-randomized, step-wedge design.

- Development of training resources/packages within a community model through school-based surveillance.
- Conducted surveillance activities and skin screenings at a remote community 750 miles from Perth.
- Assessed skin for purulent, crusted, flat/dry sores; classical/crusted scabies; tinea; head lice; boils/abscesses; and other abrasions.
- Collected skin swabs of purulent sores to be analyzed for presence of Strep A.

Ivermectin and Head Lice

**Original Article**

**Oral Ivermectin versus Malathion Lotion for Difficult-to-Treat Head Lice**

Olivier Chotidow, M.D., Ph.D., Bruno Giraudau, Ph.D., Jeremy Cottral, M.S., Aweki Iren, M.D., Robert Hoffman, M.D., Ph.D., Stephen C. Mann, M.D., and Ian Burgess, Ph.D.

- First baseline visit in May 2019 revealed high prevalence of head lice in majority of communities.
- Possible additional treatment arm of ivermectin for head lice.
- Developing resistance to current, licensed treatments.
- All previously conducted clinical trials indicate non-inferiority if not superiority of oral ivermectin to current treatments.
- Considered adding treatment arm to current trial.
- Head lice listed under ectoparasites in WHO’s list of Neglected Tropical diseases and may be subject of future study.

Protocol Development

- Analyzes sample clinic extracts to develop protocols for identifying adverse events, i.e. clinical presentations within 7 days following administration of user confusion.
- Codified into Standard Operating Procedures.

Surveillance Visits

- Conducted surveillance activities and skin screenings at a remote community 750 miles from Perth.
- Assessed skin for purulent, crusted, flat/dry sores; classical/crusted scabies; tinea; head lice; boils/abscesses; and other abrasions.
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Future Work

- Publication of baseline results.
- Begin Step 1 in October 2019 for two of the four clusters.

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References
