A Rare Diagnosis Explains Eosinophilia In A Returning Traveller

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Introduction
We report a case of eosinophilic fasciitis (EF) in a returning traveller who presented with bilateral leg swelling following an insect bite.

Initial Presentation
• 53 year old man
• PMH: hypertension
• Presents to GP with erythematous right calf and bilateral leg swelling
• Occurred two weeks after insect bite to right leg sustained during a flight from Dubai to Sydney
• GP treated with multiple courses of antibiotics over three months – no effect
• Developed fatigue, proximal muscle stiffness and reduced exercise tolerance
• Referred to Infectious Diseases

Causes of Eosinophilia

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<thead>
<tr>
<th>Tropical</th>
<th>Non-tropical</th>
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<td>Parasitic infections:</td>
<td>*Atopic/Allergic diseases</td>
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<td>*Strongyloidesis</td>
<td>*Drug reactions</td>
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<td>*Schistosomiasis</td>
<td>*Haematologic</td>
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<td>*Filariasis</td>
<td>*Neoplastic</td>
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<td>*Hookworm</td>
<td>*Connective tissue disorders</td>
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<td>*Visceral larva migrans</td>
<td>*Gastrointestinal</td>
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<td>*Ascariasis</td>
<td>*Pulmonary</td>
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<td>*Trichinelliosis</td>
<td>*Skin diseases</td>
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<td>*Toxocariasis</td>
<td>*Endocrine</td>
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<td>*Giardiasis</td>
<td>*Immunologic</td>
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• Common causes of eosinophilia and bilateral leg swelling excluded
• Referred to Rheumatology
• Skin biopsy showed thickening of subcutaneous septa and fascia with perivascular infiltrate of lymphocytes and eosinophils

Management
• Treated with prednisolone and methotrexate
• Subsequent improvement of symptoms
• Eosinophil count and CRP normalised

Eosinophilic Fasciitis (Shulman syndrome)
• Rare, ~250 case reports
• No definite diagnostic criteria
• Connective tissue disorder
• Involves thickening of the fascia and dermis, resulting in oedema of the limbs
• Triggers include vigorous exercise, pharmacological agents (including statins and heparins) and insect bites

Consider eosinophilic fasciitis as a differential in patients presenting with eosinophilia and bilateral lower limb oedema, after excluding common causes.

References