

# A Rare Diagnosis Explains Eosinophilia In A Returning Traveller

Dr Tamsin Oxley, Dr Sarah Kennedy & Dr Joanna Allen  
Department of Infection and Travel Medicine  
Leeds Teaching Hospitals NHS Trust, Leeds, UK

## 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

## Investigations

Full blood count	WCC normal, eosinophils $1.64 \times 10^9/L$ , CRP 40 mg/mL
Serology for HIV, Hep B, Hep C, Borrelia, strongyloides, filarial antibodies	Negative
Stool sample	Entamoeba coli (non-pathogenic)
Chest radiograph	Normal
Trans-thoracic echocardiogram	Borderline ejection fraction 55%
Serum NT-proBNP	Normal
CT abdo/pelvis	Normal
Lower limb ultrasound doppler	No deep vein thrombosis

## Causes of Eosinophilia

Tropical	Non-tropical
Parasitic infections: *Strongyloidiasis *Schistosomiasis *Filariasis *Hookworm *Visceral larva migrans *Ascariasis *Trichinellosis *Toxocariasis *Giardiasis	*Atopic/Allergic diseases *Drug reactions *Haematologic *Neoplastic *Connective tissue disorders *Gastrointestinal *Pulmonary *Skin diseases *Endocrine *Immunologic

- 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



Figure 1 (1)  
Left sided skin changes in EF

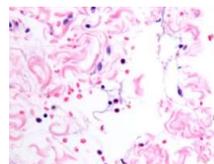


Figure 2 (2)  
Scattered eosinophils in muscular fascia

- Subsequent MRI - thickening of the fascia supporting the diagnosis of EF

## Management

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

## Eosinophilic Fasciitis

(Shulman syndrome) <sup>(3)</sup>

- Rare, ~250 case reports <sup>(4)</sup>
- No definite diagnostic criteria
- Connective tissue disorder
- Involves thickening of the fascia and dermis, resulting in oedema of the limbs <sup>(5)</sup>
- Triggers include vigorous exercise, pharmacological agents (including statins and heparins) and insect bites <sup>(6)</sup>

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

## References

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tammyoxley@doctors.org.uk