

Supplementary Table 3: Summary of investigations - Case 3.

Test	Result	Comments
Haematology and biochemistry		
FBC	Hb 69 g/L, WCC $1.66 \times 10^9/L$, neutrophils $1.27 \times 10^9/L$, platelets $17 \times 10^9/L$, lymphocytes $0.17 \times 10^9/L$, and eosinophils $0.01 \times 10^9/L$	
Biochemistry	LFTs normal; renal function: normal; albumin $<10g/L$ TSH 9.3 mIU/L, T4 6.8 pmol/L	Clinically hypothyroid
Microbiology		
Standard bacterial blood culture	Serial cultures - no growth after 5 days	Taken from peripheral blood and PICC line sites
Extended bacterial blood culture	No growth after 10 days	
Sputum culture (mycobacterial)	Sputum cultures x4 - no growth after 8 weeks	

Test	Result	Comments
Blood culture (mycobacterial)	Blood cultures x2	Culture negative at 18 weeks Terminal smear positive and PCR confirmed <i>M. genavense</i>
BAL MCS and fungal culture	Respiratory flora	
BAL (Mycobacterial)	AFB smear positive; culture negative	Cepheid MTB/RIF negative Culture negative at 8 weeks PCR confirmed <i>M. genavense</i>
Urine MCS	No white cells Cultures negative	
Bone marrow aspirate MCS and fungal culture	Culture negative	

Test	Result	Comments
Bone marrow aspirate (Mycobacterial)	AFB smear and culture negative	Granulomatous inflammation on histology Mycobacterial PCR negative
Stool MCS	<i>Salmonella/shigella/campylobacter/E. coli</i> not detected	
Stool <i>C. difficile</i> screen	Not detected	
Mycology		
<i>Cryptococcal</i> antigen (blood)	Negative	
BDG	<31 pg/ml (>80 pg/ml)	Negative
Aspergillus antigens (blood and BAL)	0.051 (>0.5)	Negative
Virology		

Test	Result	Comments
Respiratory viral PCR	Rhinovirus/enterovirus PCR positive on BIOFIRE® (bioMérieux, Marcy-l'Étoile, France)	BIOFIRE unable to differentiate rhinovirus from enterovirus molecularly
HIV	HIV PCR copies/mL 683,859 copies/mL Absolute CD4 of 1 cells/ μ L /1% HLA B27 - negative	
HHV 6 PCR (blood)	Positive	Of doubtful significance
Stool virology	Rotavirus/norovirus/adenovirus/sapovirus/astrovirus PCR not detected	
Parasitology		
Stool OCP x3	Not detected	
Stool Crypto/Giardia EIA	Negative	
Imaging		

Test	Result	Comments
Transthoracic echocardiogram	<p>Good quality scan. All valves visualised and structurally normal with no significant valvular regurgitation</p> <p>Tiny mobile mass on the aortic valve is seen within the aortic root</p>	<p>Tiny mobile mass on the aortic valve is seen within the aortic root and would be in an unusual location for vegetation</p> <p>This is most in keeping with Lambl's excrescence</p> <p>Referred for TOE</p>
CT TAP	<p>Splenomegaly with splenic infarcts and possible low attenuation foci</p> <p>Diffuse subcutaneous oedema and ascites in keeping with hypoalbuminaemia</p> <p>Inflammatory changes in both lungs with bronchiectasis</p> <p>Low volume nodes at hila, across right pleura and upper abdomen</p>	CT with contrast

AFB: acid-alcohol fast bacilli; BAL: bronchoalveolar lavage; BDG: β -D-glucan; Cepheid MTB/RIF: Cepheid Xpert[®] (Danaher, Washington, D.C., USA) mycobacterium tuberculosis/rifampicin resistance; Crypto: cryptosporidium; CT TAP: computed tomography thorax, abdomen, and pelvis; EIA: enzyme immunoassay; FBC: full blood count; Hb: haemoglobin; HHV 6: human herpes virus 6; HLA-B27: human leukocyte antigen B27; LFT: liver function test; MCS: microscopy, culture, and sensitivity; MTB: *Mycobacterium*

tuberculosis; OCP: microscopy for ova, cysts, and parasites; PICC: peripherally inserted central catheter; RIF: Rifampicin; T4: thyroxine level 4; TOE: transoesophageal echo; TSH: thyroid stimulating hormone; WCC: white cell count.