

ABSTRACT

Cold autoimmune haemolytic anaemia is characterized by cold reactive autoantibodies causing extravascular haemolysis and cold related symptoms due to occlusion of microcirculation. Gangrene is a rare complication in this setting. Here we describe a patient with cold agglutinin induced peripheral gangrene, associated with atypical pneumonia due to *Mycoplasma pneumoniae*. A 55-year old female with a history of hypertension presented with a two week history of low grade fever and cough. Later she developed lethargy, exertional dyspnea and acrocyanosis followed by dry gangrene of the fingers of the left hand. Investigations revealed moderate anaemia, blood film evidence of cold agglutinations and positive direct antiglobulin test with C3d specificity indicating cold autoimmune haemolysis. Chest X-ray showed right lower lobe patchy inflammatory infiltrate. Mycoplasma antibody was positive in rising titers. Vascular imaging was negative for major correctable vascular occlusion. Screening for infective endocarditis and cardiac embolism were negative. Investigations for the other infectious, autoimmune and malignant etiologies for cold agglutinins were negative. Patient was treated with appropriate antibiotics, avoidance of cold exposure and supportive blood transfusions which led to resolution of haemolysis.