Correspondence

Treatment of progressive multifocal leukoencephalopathy

Sir,

I was very interested to read Pallin et al.’s¹ account of the management of an immunosuppressed patient with sarcoidosis who developed progressive multifocal leukoencephalopathy. We had such a patient 30 years ago² when the only effective antiviral agent was cytosine arabinoside. We treated her with successive courses more than 18 months contrary to the advice of the virologists, because it did not seem likely that a single course would totally eradicate the virus. She made a very good recovery and died 12 years later of renal failure. Postmortem examination³ showed no evidence of viral activity. She continued treatment of the sarcoidosis with corticosteroids.

M. O’Brien
Emeritus Physician
Guy’s and St.Thomas’ Hospital, London, UK
email: obrmd@btinternet.com

References


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Fatal haemorrhage following endobronchial ultrasound-transbronchial needle aspiration: an unfortunate first

Sir,

Endobronchial ultrasound-transbronchial needle aspiration (EBUS-TBNA) has revolutionised the investigation of mediastinal lymphadenopathy.¹–⁴ In this report, we describe a patient who died within 48 hours of this procedure.

A 61-year-old man with 40 pack-year smoking history presented with dyspnoea, weight loss and hip pain. Drug history included paracetamol, diclofenac, morphine sulphate and amoxicillin. There was no history of bleeding disorders or excess alcohol consumption. Thoracic and abdominal computed tomography (CT) revealed widespread mediastinal and bilateral hilar lymphadenopathy, a right upper lobe nodule (14 × 12 mm), bony lytic lesions but no liver metastases. Full blood count demonstrated a platelet count of 85 × 10⁹/l (normal range 140–400), elevated white blood cell count of 19 × 10⁹/l (normal range 4–10) and haemoglobin of 134 g/l (normal range 140–180). Blood film showed a leukoerythroblastic reaction consistent with malignancy or bone marrow infiltration. Renal function was impaired with estimated glomerular filtration rate of 47 ml/min/1.73 m² (normal range 60–140) and alkaline phosphatase was 1039 U/l (normal range 30–130), gamma-glutamyl transferase 142 U/l (normal range 4–35) and bilirubin 26 μmol/l (normal range 0–20). A coagulation screen was not performed.

EBUS-TBNA of subcarinal (four passes) and right hilar (three passes) lymph nodes was carried out with a 21-gauge needle by an experienced operator who had performed >170 procedures. The proximal bronchial tree appeared normal and the needle was visualised during lymph node sampling at all times without apparent complication. Six hours later, the patient developed haemoptysis of increasingly larger volumes. Repeat blood tests demonstrated no significant fall in haemoglobin but mild prolongation of prothrombin time (PT) and activatedpla.

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partial thromboplastin time (APTT) suggestive of factor deficiency. He was treated with oxygen, tranexamic acid, fluids and blood transfusion. Given the putative diagnosis of metastatic lung cancer, requirement for high-flow oxygen and clinical instability, further CT imaging, bronchoscopy or invasive mechanical ventilation was deemed inappropriate. The patient subsequently died following massive haemoptysis. His family did not wish a postmortem examination and this was not pursued further following discussion with the procurator fiscal.

As far as we are aware, this is the first reported death as a direct consequence of or occurring shortly after EBUS-TBNA. The exact cause of the patient’s continued haemoptysis is not entirely clear but the relative thrombocytopenia, possible marrow infiltration (with potentially defective platelet function) and prolonged PT and APTT were likely major contributing factors to presumed lymph node bleeding into the bronchial tree. It is unfortunate that a post-mortem was not carried out in order to establish the exact cause of the patient’s ultimate demise although features of primary lung adenocarcinoma were found in both nodal stations. A systematic review of 20 studies assessing the safety of EBUS-TBNA reported no serious complications. In the largest of these studies (n=502 patients), no complications were reported. Only three of the studies reported complications of agitation, cough and presence of blood at the puncture site. Given the case highlighted, clinicians should take extra caution when performing EBUS-TBNA in patients with a combination of thrombocytopenia, metastatic malignancy with possible marrow involvement and hepatic dysfunction.

D.R. Miller  
H. Haja Mydin  
A.D.L. Marshall  
G.S. Devereux  
G.P. Currie  
Chest Clinic C  
Aberdeen Royal Infirmary  
Aberdeen, Scotland, UK  
email: graeme.currie@nhs.net

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