Atypical presentation of multiple pulmonary emboli in a young air traveller

Sir,

Pulmonary emboli and deep venous thrombosis are well recognized complications of air travel. It is surprising, however, that these can occur in fit young people, especially after a considerable delay. The following case shows that this can lead to a potentially dangerous delay in establishing the diagnosis.

Case report. A 44-year-old broker presented two weeks after a 15-hour flight from Africa. He had woken at 03.00 hours with a right-sided chest pain which was sharp and pleuritic and radiated through to his back. Although mildly obese and a smoker, he was otherwise in good health. The only positive finding during the course of examination was reduced expansion of the right side of his chest. Specifically there were no abnormalities found in his legs. Chest X-ray showed a small area of collapse in the left lower zone compatible with infection or infarction of uncertain age.

During the night following presentation he sweated profusely. This, in combination with the X-ray findings and the continuation of his pain suggested the diagnosis of chest infection and he was treated with erythromycin 500 mg six-hourly.

Over the ensuing five days he had intermittent pains in the left lower and right upper chest, but his overall condition remained unchanged. A second X-ray was taken. This now showed a number of areas of collapse and consolidation, particularly in the right lower zone. Radiological diagnosis of multiple pulmonary emboli was made, and he was admitted to hospital for investigation and anticoagulation therapy. No cause for the pulmonary emboli was found, but their existence was confirmed by V/Q scan. This showed a wedge-shaped perfusion deficit at the left base in addition to a matched ventilation-perfusion defect at the right base which corresponded to a raised right hemidiaphragm seen on the repeat X-ray.

Within one week of anticoagulation the left lower zone had cleared on X-ray and the patient was asymptomatic. By five weeks both lung fields were entirely clear on the X-ray.

That pulmonary emboli can readily follow long periods of sitting was recognized long ago. During the Second World War Simpson[1] reported emboli occurring in people taking refuge in air-raid shelters. More recently it has been noted to occur following travel[2] and particularly following air travel.[3] Mechanisms suggested for this include increased tendency to clot formation in the legs secondary to direct compression of veins, and the reduced venous return from them found in the sitting position,[4] and secondary to dehydration/haemoconcentration caused by the low humidity of aircraft cabins and, in some, the ingestion of alcohol.[5] Heavy smoking may also increase blood viscosity. In this case the correct diagnosis was considered at presentation but was discounted because it was not realized that pulmonary emboli could present so late following a flight, nor that they could occur in such a healthy and relatively young person with so few supporting signs.

Advice regarding the prevention of pulmonary emboli should be given to all long distance air travellers at risk. It is important to maintain a high fluid, low alcohol intake throughout the flight. Travellers should change their position regularly and should exercise frequently. This means at least doing static exercises, preferably with occasional walks also. The role of drugs to prevent clots forming is unclear but it would seem prudent to suggest for patients particularly at risk the use of aspirin for several days prior to flying, where no contraindication to this exists.

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Doctors and nuclear war

Sir,

In 1982 the Council of the Royal College of General Practitioners approved a statement in relation to nuclear weapons which included the sentence:

> 'The prevention of war, nuclear or conventional, offers the only security against its consequences. Council recognizes that in attempting to achieve that aim alternative strategies exist and that it has no mandate to support or oppose one particular strategy.'

In common with many colleagues within the Medical Campaign Against Nuclear Weapons, I believe that this assertion is incorrect and that the College's refusal to commit itself on a clear moral issue is shameful.

There is in fact no way that we can, for certain, protect ourselves against the consequences of nuclear weapons. Nuclear secrets are no longer secret and there is very little to prevent any small country from making its own bomb. Indeed it is quite possible that a nuclear device might be manufactured privately by an individual terrorist.

World history shows that there is never any shortage of fanatics or madmen prepared to use violence to achieve their own ends, and the reason given by all of them, whether they be national heroes or individual fanatics, is that the violent means are justified by the end, an 'ideal society'.

Recent events in the Middle East and in Ireland have shown how easy it is for a group of such fanatics, unbacked by any nation state, to hold the world to ransom and the important lesson to learn from this is that military might is powerless against them. America, with all its power, could do nothing to stop a group of Shi'ite Moslems from achieving their goal. Idealogues are not put off by nuclear weapons which are no protection against individual terrorists.

I believe that in any case a plain moral issue has been obscured by political arguments. Are we as individual doctors prepared to condone the possible use of weapons of mass desctruction? To argue that their existence on English soil precludes their use is nonsense. There is no point in possessing a weapon unless one is prepared to use it.

Are there therefore any circumstances in which we as individuals might be prepared to press the button which would launch a weapon of mass destruction against the innocent citizens of another country, whatever the provocation? In other words are we willing to undertake genocide? If the answer is 'no' there can be no further discussion on the matter. If the answer is 'yes' then we part company.

I would ask the Council to reconsider their 1982 statement and to come down unequivocally on one side or the other and I ask individual members of the College to consider where they stand also.

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