Pulmonary thromboembolism in an East African tertiary referral hospital

Abstract:

Pulmonary thromboembolism (PTE) is a frequent cause of mortality in Kenya, but its characteristics are hardly reported in Subsaharan Africa. To describe the pattern of PTE among black Africans, in a Kenyan referral hospital. Retrospective study at Kenyatta National Hospital (KNH), Nairobi, Kenya. Records of patients seen between January 2005 and December 2009 were examined for mode of diagnosis, comorbidities, age, gender, treatment and outcome. Data were analyzed using SPSS version 15.0 and are presented in tables and bar charts. One hundred and twenty-eight (60 male; 68 female) cases were analyzed. Diagnosis was made by clinical evaluation, a Well's score of >4.0, high D-dimer levels and ultrasound demonstration of a proximal deep venous thrombosis (DVT, 35.9%), lung spiral computer tomography (CT, 50%), multidetector CT (7.8%) and angiography (6.3%). Most frequent comorbidities included DVT (36%); hypertension (18.8%); pulmonary tuberculosis (PTB, 12.5%); HIV infection (10.9%), pueperium, diabetes mellitus and cigarette smoking (9.4% each). Mean age was 40.8 years (range 5-86 years) with a peak between 30 and 50 years. Over 46% of patients were aged 40 years and less. Male:female ratio was 1:1.13. All the patients were treated with anticoagulants and thrombolytics with only one having embolectomy. Ninety-two patients (71.9%) recovered, 18.8% of them with cor pulmonale, while 28.1% died. PTE is not uncommon in Kenya. It affects many individuals below 40 years without a gender bias, and carries high morbidity and mortality. Associated comorbidities include venous thrombosis, lifestyle conditions and communicable diseases. Control measures targeting both are recommended