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NEUROLOGICAL PICTURE

Post-arteriography cholesterol embolism

Figure 1 Cholesterol embolism of the retina.

Figure 2 Necrotic lesions of the toes.

A seventy seven year old man underwent arteriography of the supra-aortic vessels for investigation of possible carotid stenosis. Immediately after arteriography the patient developed impaired consciousness and diffuse livedo predominantly in the lower limbs. Simultaneously his blood pressure increased to 230/110 mm Hg.

Twenty four hours later, impaired renal function was evident (creatinine 380 mmol/l; urea 41 mmol/l). Later on, we found variable circulation in the toes associated with cyanosis.

The syndrome of cholesterol embolism was suspected and confirmed by the presence of cholesterol emboli in the retina (fig 1). Despite stopping anticoagulation, consciousness worsened, probably due to repetitive ischaemia; the toes became necrotic (fig 2); the patient developed anal bleeding and colonoscopy showed necrotic bleeding from the colonic mucosa. The erythrocyte sedimentation rate was increased to 100 mm/hour.

Cholesterol embolism may complicate aortic atheroma. It is most often triggered by aortic angiography and sometimes by anticoagulant therapy. In several aspects the disease may present as a necrotising angiitis analogous to polyarteritis nodosa.

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