The spotty sign

A 72-year-old female was admitted because of renovascular hypertension. Three years ago hypertension was discovered. Her plasma creatinine was 182 µmol/l. Her past medical history was unremarkable. Apart from a smoking history she had no other cardiovascular risk factors. Renal angiography was performed and showed bilateral atherosclerotic renal artery stenoses. She was treated with balloon angioplasty on the left side (truncal stenosis) and balloon-expandable stent placement on the right side (ostial stenosis). During the procedure heparin i.v. and afterwards oral coumarins were given. Two days after the procedure the patient was discharged in good physical condition without complaints but still with hypertension. Two weeks later she presented with lower back pain and prostration. On physical examination skin abnormalities were seen as shown in Figures 1 and 2.

Blood pressure was still elevated while on the same antihypertensive medication as before the procedure. Laboratory results revealed that plasma creatinine had increased to 250 µmol/l. These findings could not be explained by restenoses because spiral computed tomographic angiography showed patent renal vessels on both sides. The patient showed the clinical picture of livedo reticularis of the skin, which was confined to below the level of T12–L1, about where the renal arteries branch off the aorta. The eosinophil count was elevated (0.41 × 10⁹/l).

What is your diagnosis?

(Answer on the next page)
Answer to quiz case on the preceding page —
Cholesterol embolism

The clinical diagnosis of cholesterol embolism was made with manifestations in the skin and probably the kidney. Oral coumarins were discontinued. At this moment, 3 months later, the skin manifestations have tended to disappear. The patient feels better, blood pressure is within the normal range with three classes of antihypertensives, the plasma creatinine is 295 μmol/l. Two factors predisposing to cholesterol embolism can be identified in this atherosclerotic patient: radiological vascular instrumentation, and anticoagulant treatment.

Suggested reading


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