

C S

Acute Arterial Occlusion Associated with Protein C and S Deficiencies

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Sudden acute arterial occlusion can result from a multitude of pathological processes. Although the appearance and the secondary effects of an acute arterial occlusion are similar regardless of the underlying cause, the treatment and prognosis are different. Therefore, establishing a correct diagnosis is crucial. Acute arterial occlusion is most frequently a complication of ischemic cardiac disease, with an atrial fibrillation occurring in most patients. An identifiable non-cardiac source of the acute arterial occlusion can be found in 5~10% of patients. However, in these cases, the specific source of the occlusion cannot be determined clinically or even at autopsy. Possible hypercoagulable states should be suspected and appropriately evaluated, particularly in patients with no history of antecedent occlusive disease who present with sudden arterial occlusions, or in patients with malignant disease. Protein C and protein S deficiencies are frequently described as a cause of the hypercoagulable states. We reported 3 cases of acute arterial occlusion associated with protein C and S deficiencies. (*J Korean Surg Soc* 2003;64:269-274)

Key Words: Acute disease, Arterial occlusion, Protein C, Protein S, Deficiency

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 : 2002 10 24 , : 2002 10 30

80~90%가
 5~10%
 5~10%
 .(1-3)
 . 1845 Virchow
 , 3가 Virchow 가
 3가
 가 .(4) 3가
 state) '(hypercoagulable
 S C S
 . C S
 .(5-12)
 3

1.
 68 8
 (pain), (pallor), (paresthesia),
 (poikilothermia)

가
 것 외에 특이 소견은 없었다. 혈액 화학 검사 결과 간기능



Fig. 1. Femoral arteriographic findings in case 1. (A) Preoperative arteriography showed complete occlusion of left superficial femoral artery. (B) Intraoperative arteriography showed patent femoral and popliteal artery suggesting successful thrombectomy.

category IIb).(13)

(acute limb ischemia clinical

가

(Fig. 1A).

heparin sodium

catheter

가

plasty)

(transeso-

phageal echocardiography)

C S 47% 15%

C S

Fogarty

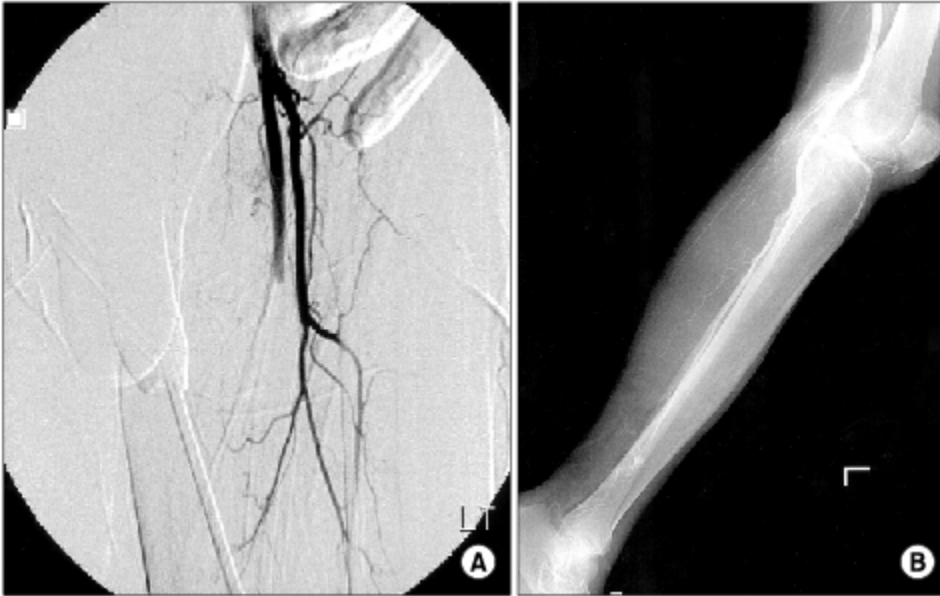


Fig. 2. Femoral arteriographic findings in case 2. (A) Preoperative arteriography showed left distal superficial femoral artery occlusion about 10-cm in length. (B) Intraoperative arteriography showed patent femoral and popliteal artery suggesting successful thrombectomy.

2.

80

1

(100/min)

가

(acute limb ischemia clinical category III).(13)

10-cm

(Fig. 2A).

sodium

Fogarty catheter

가

2B)

가

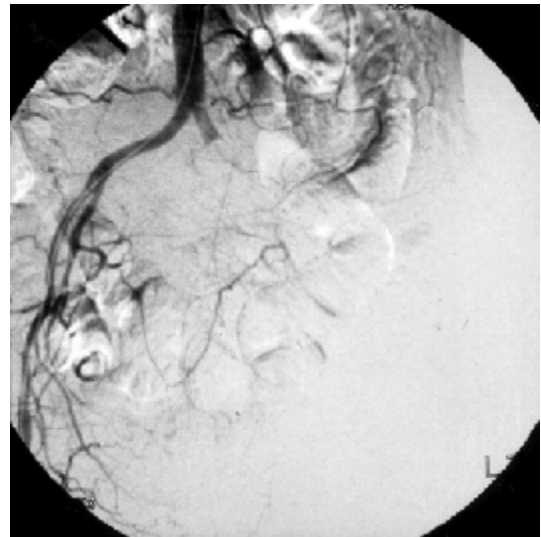


Fig. 3. In case 3, preoperative arteriography showed complete occlusion of left common iliac artery.

heparin

S S

S

59%

12%

. C

C

(reperfusion injury)
(demarcation)

(Fig.

1

3.

71

8

(90/60 mmHg), (104/min) 가 80~90% 가 5~10% 2~3 가 5~10% 3 가 가 .(1-3) 가 (acute limb ischemia clinical category IIb).(13)

1845 Virchow 가 , 3가 Virchow 가 가 .(4) 3가 Fogarty catheter 가 C S .(5-12) 7-cm C S K (activated protein C) factor Va VIIIa tissue plasminogen activator C (natural fibrinolytic activity) 가 .(15,16) S C (cofactor) . C S (homozygous form) (heterozygous form) C 60% C S C S 4~5% C S .(5-12,15-18) C S 가, 가, (prosthetic device) 가, 가 C S 가

가 C S (15,16) Esmon 0.3% (19). C S

가 (15,16)

가 C S sodium citrate tube - 70°C ()

C S Human protein C/S 'NL' NANORID™ radial immunodiffusion kit (The Binding Site Ltd, Birmingham, UK)

C S 60~140% C S 3 . 3

C S 2 C 1 . C

S 가

C S 가 (16)

가 가 C S

C S 가

C S

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