Peripheral Vascular Spasm as a Prodrome of Herpes Zoster

By Leon Blumberg, M.D., and Albert Behrend, M.D.

SEVERE vascular spasm involving the major arteries of an extremity may occur as a result of embolism, inflammation, or local irritation of larger nerve trunks. Recently we were consulted by a patient with severe arterial spasm of one leg. There was no obvious cause for this spasm, and response to conservative therapy was good. Three days after the onset of symptoms, typical lesions of herpes zoster appeared on the affected leg. Review of the literature did not disclose a similar case.

CASE REPORT

Mrs. B. L., a 46-year-old white woman, appeared on September 20, 1955, with a complaint of severe pain in the left thigh and leg brought on by exertion. Pain in the leg was extreme, and movement was barely tolerable. Circulation in the right leg was undisturbed. There was no previous history of cardiac or vascular disease and no history of direct trauma.

On physical examination the left leg was pale, and mottling was beginning to occur below the knee. The leg and foot were cold to touch. The dorsalis pedis and posterior tibial pulses could not be felt, but the left femoral pulse was barely perceptible. The patient was able to move the toes and the extremity, but movement was associated with considerable pain. The pulse rate was 80, and the blood pressure was 144/82. Physical examination was otherwise normal.

Papaverine hydrochloride 60 mg. and tolazoline hydrochloride (Priscoline) 25 mg. were given every 3 hours. Improvement was prompt in response to this therapy. Within 4 hours the mottling had disappeared, and the leg had recovered some color and warmth. The dorsalis pedis and the posterior tibial pulses became faintly perceptible. Pain was also partially relieved. In view of the prompt improvement, hospitalization was not advised. Medication was continued until September 22, when the papaverine was stopped because of vomiting. At this time the leg was warm, and all pulses were present and strong. Pain was still present. On September 23 the typical lesions of herpes zoster appeared on the leg from the inguinal ligament to the sole of the foot, along the distribution of the femoral nerve. The clinical course thereafter was typical of herpes zoster, with a great deal of pain as a dominant feature, relieved only by narcotics. It terminated finally after the patient received radiation therapy.

DISCUSSION

According to Kramer, spasm of major peripheral arteries may be induced by various forms of irritation. As an example he mentioned the vascular disturbances seen in patients with cervical ribs. In still other patients, it is impossible to locate the source of irritation. Certain lesions that cause irritation of the larger nerve trunks may also affect peripheral vessels, or the cause may be biochemical or toxic.

SUMMARY

A case of severe vascular spasm involving the major arterial circulation of the lower extremity has been reported. The unusual feature of this case is the fact that the arterial spasm apparently was a prodrome of herpes zoster, the cutaneous manifestations of which appeared 72 hours after the onset of vasospasm. Response of the vasospastic symptoms to non-operative therapy was good; the herpes zoster required roentgen therapy for relief.

SUMARIO IN INTERLINGUA

Es reportate un caso de severa spasmo vascular que involveva le major circulation arterial del extrimite inferior. Le aspecto inusual de iste caso es le facto que le spasmo arterial esseva apparentemente un prodromo de herpes zoster cuje manifestationes cutanea appareva 72 horas post le declaration del vasospasma. Le responsa del symptomas vasospastic al therapia non-chirurgic esseva bon. Le herpes zoster requireva roentgenotherapia pro su alleviamento.

REFERENCE

Peripheral Vascular Spasm as a Prodrome of Herpes Zoster
LEON BLUMBERG and ALBERT BEHREND

Circulation. 1956;14:379
doi: 10.1161/01.CIR.14.3.379
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 1956 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/14/3/379

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/