



# ViperSlide-Induced Anaphylaxis: A Cautionary Complication During Orbital Atherectomy

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## IMAGES IN INTERVENTION

# ViperSlide-Induced Anaphylaxis

## A Cautionary Complication During Orbital Atherectomy

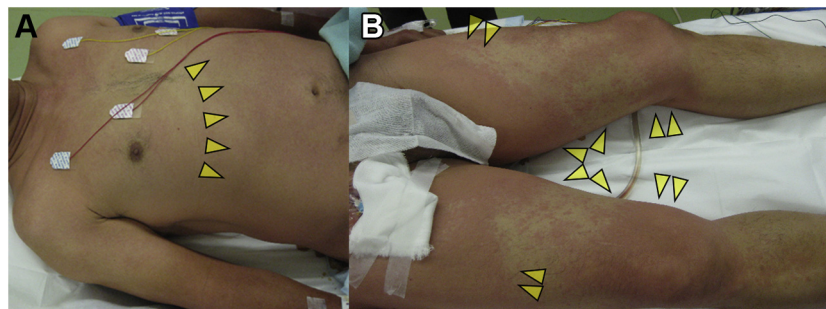


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A 62-year-old man with no history of food or drug allergies underwent percutaneous coronary intervention for effort angina pectoris. Intravascular ultrasound revealed calcified plaques that required atheroablation in the proximal left anterior descending artery, which were treated by orbital atherectomy (OA) using a Diamondback 360 coronary OA system (Cardiovascular Systems). After the OA procedure, hemodynamic collapse occurred despite maintaining a good coronary flow. To achieve hemodynamic stability, intravenous fluids and continuous

noradrenaline were administered; subsequent balloon angioplasty was performed to obtain an optimal lumen gain. Coronary blood flow was completely preserved, and no bleeding events were observed; however, unstable hemodynamics persisted. Meanwhile, an erythematous rash with pruritus was observed in his lower body, which was suggestive of anaphylaxis (**Figure 1**). Intravenous antihistamine drugs (chlorpheniramine 5 mg and famotidine 20 mg) and corticosteroids (methylprednisolone 125 mg) were administered immediately,

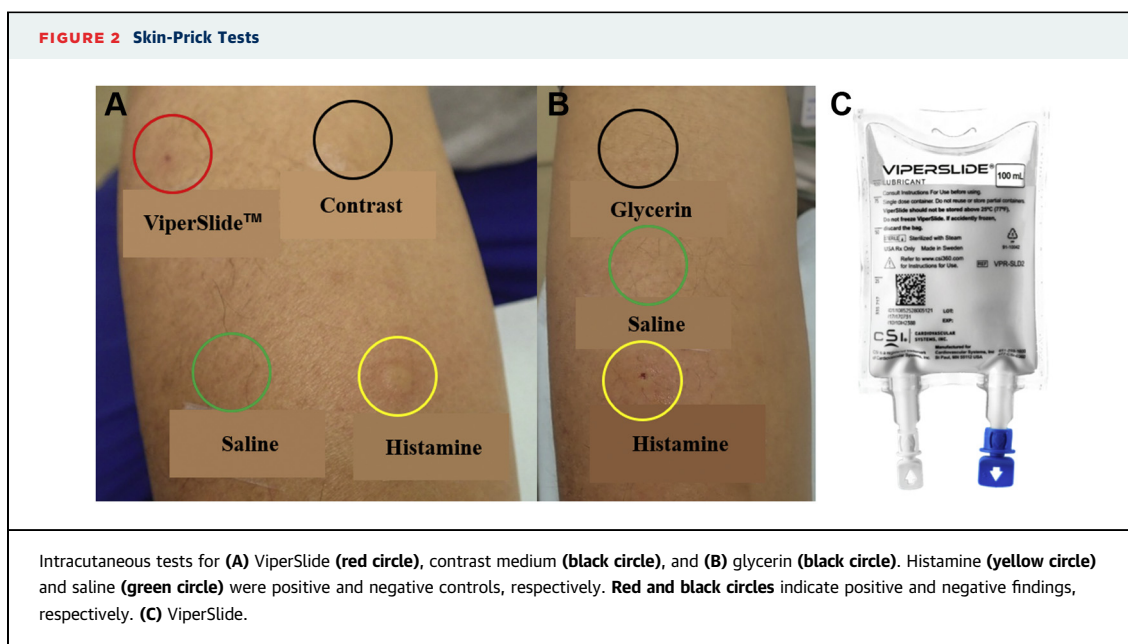
**FIGURE 1** Skin Findings After Percutaneous Coronary Intervention



(A) Erythema of the abdomen (arrowheads). (B) Erythema and wheal of the lower body (arrowheads).

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which then allowed for a gradual decrease in noradrenaline dosage and achieve hemodynamic stability.

The drug-induced lymphocyte stimulation test and evaluation of serum immunoglobulin E levels revealed no findings of adverse reactions to drugs, contrast medium, or food, including egg white and yolk (Gal d and ovomucoid), and soybean (Gly m). However, the skin-prick test with ViperSlide (Cardiovascular Systems) was positive, indicating that the hemodynamic instability during percutaneous coronary intervention was induced as an anaphylaxis of the ViperSlide (Figure 2).

ViperSlide—a lubricant for reducing friction of the OA crown and preventing vascular spasm—contains soybean oil (10%), glycerin (2.25%), egg yolk phospholipid (1.2%), and water.<sup>1</sup> Therefore, the use of

ViperSlide is contraindicated in patients with egg yolk and soybean allergies. To our knowledge, this is the first report on the potential anaphylactic activity of ViperSlide during OA in patients with no allergy to known antigens. Therefore, ViperSlide-induced allergy needs to be recognized as a rare and cautionary complication and pitfall during OA.

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**KEY WORDS** adverse reaction, anaphylaxis, orbital atherectomy, percutaneous coronary intervention, ViperSlide