A tablet of clopidogrel remaining in the lower esophagus after primary percutaneous coronary intervention for acute myocardial infarction

A 70-year-old woman with ST-segment elevation myocardial infarction (STEMI) underwent primary percutaneous coronary intervention (pPCI). She did not have a past history of either gastrointestinal disease or pemphigoid. Before the pPCI, she received dual antiplatelet therapy (a total of six tablets taken as a loading dose without much water) and maintained a supine position for several hours. The patient experienced back pain during the pPCI procedure, and blood testing showed a hemoglobin level of 10.0g/dL. During gastroscopy after the pPCI, a thin white coat of esophageal erosion was noted (● Fig. 1a, b). A clopidogrel tablet (red arrow) remains in the esophagus. c Gastroscopic image obtained 1 week after pPCI shows healing of the epithelial membrane.

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It is not clear if the drug itself caused the widespread exfoliation of the lower esophageal mucosa seen in this patient. Another possibility is that the exfoliation resulted from ischemic mucosal damage or “stress” associated with STEMI, and the drug exacerbated the problem to some extent. Because clopidogrel is a prodrug and exerts its antiplatelet effect after absorption, the clopidogrel tablet itself probably stimulated the esophageal mucosa in the present case [1–3]. To avoid such undesirable situations, a patient with STEMI who is undergoing pPCI should take an adequate amount of water with the pills and should maintain a right lateral decubitus position for a few minutes in the emergency room before going to the catheter laboratory.

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Tomomi Koizumi, Shigeyuki Nishimura
Department of Cardiovascular Medicine, Saitama International Medical Center, Saitama Medical University, Hidaka, Japan

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References


Bibliography

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Corresponding author

Tomomi Koizumi, MD
Division of Cardiovascular Medicine
Saitama International Medical Center
Saitama Medical University
1397-1 Yamane Hidaka
Saitama 350-1298 Japan
Fax: +81-42-984-4741
tkoizumi@saitama-med.ac.jp