Clopidogrel does not work following cardiopulmonary resuscitation

Thor W. Bjelland · Øyvind Hjertner · Pål Klepstad ·
Kjell Kaisen · Ola Dale · Bjørn Olav Haugen

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Dear Sir,

The platelet inhibitor clopidogrel is often part of dual antiplatelet therapy used for acute coronary syndromes. However, its effect depends on a sequential series of events, making it prone to failure [1]. The paper by Souckova et al. on the bioavailability of clopidogrel used during therapeutic hypothermia (TH) following cardiopulmonary resuscitation excellently illustrates this point, as only two of nine hypothermic patients showed adequate platelet inhibition. This was due to both delayed clopidogrel absorption and reduced bioavailability [2]. In the discussion of their findings, Souckova et al. could have lent further support for their conclusion by citing a previous larger study on clopidogrel efficacy during TH after cardiac arrest [3]. In this study, we observed that clopidogrel administered during TH was inefficacious in all 25 patients after 1 day of treatment. Moreover, only five of 16 subjects showed satisfactory clopidogrel platelet inhibition on day three. The clinical consequences are probably shown by Penela et al., who observed that stent thrombosis occurred in five out of 11 patients given percutaneous coronary intervention (16 stents were placed) and TH. This is an alarming rate compared to the 0.44 % reported for patients not treated with TH in the same period and hospital [4]. Preliminary results

from a larger study presented by Ibrahim et al. at the ESC 2011 meeting also suggest a lack of clopidogrel effect during TH [5]. The conclusion from these studies is unequivocal: Clopidogrel should be replaced with an active, intravenously administered drug in patients treated with TH.

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T. W. Bjelland (✉) · Ø. Hjertner · P. Klepstad · O. Dale ·
B. O. Haugen
Norwegian University of Science and Technology,
Trondheim, Norway
e-mail: thor.w.bjelland@ntnu.no

Ø. Hjertner · P. Klepstad · O. Dale · B. O. Haugen
St. Olav's University Hospital, Trondheim, Norway

K. Kaisen
Stavanger University Hospital, Stavanger, Norway