


Aspirin “Allergy” and Resistance

In a recent article, Gum et al. discussed aspirin resistance, and Eikelboom et al. (2) wrote an editorial comment regarding this topic. We have seen several patients who reported that they seemed to have “allergic” reactions to aspirin. These “allergic” reactions consisted primarily of asthma-type attacks. Careful study revealed that these patients are not “allergic” to aspirin in the classical way; rather, they are resistant and have reactions consisted primarily of asthma-type attacks. Careful study revealed that these patients are not “allergic” to aspirin in the classical way; rather, they have allergies to aspirin. These patients then refuse to take aspirin and claim that they “allergic” reactions to aspirin. These “allergic” reactions consisted primarily of asthma-type attacks. Careful study revealed that these patients are not “allergic” to aspirin in the classical way; rather, they are resistant and have

We thank Auer et al. for their comments on our paper (1). Auer et al. would like to add atrial fibrillation (AF) after cardiac surgery to the list of cardiovascular disorders that are exacerbated by low serum potassium concentrations. Atrial fibrillation is a common and costly complication after cardiac surgery (2). It is significantly more common when serum potassium falls below 3.5 mmol/L, and avoidance of hypokalemia may reduce its incidence (3,4).

The stress of cardiothoracic surgery increases sympathetic tone, and this may predispose one to the development of AF. Interestingly, experimental evidence suggests that sympathetic activity reduces the arrhythmic threshold of hypokalemic dogs (5). This is unsurprising, given the data that link catecholamines with hypokalemia and the favorable effects of beta-blockade on the renin-angiotensin-aldosterone system (6,7).

Therefore, we agree that avoidance of perioperative hypokalemia in patients undergoing cardiothoracic surgery is likely to reduce the incidence of AF in this setting and avoid unnecessary morbidity and costs. A randomized controlled trial of targeted potassium repletion versus standard care is thus warranted.

John E. MacDonald, MBChB, MRCP
Dundee University
Clinical Pharmacology
Level Seven
Ninewells Hospital
Dundee, Scotland DD1 9SY
United Kingdom
E-mail: macdonald_je@hotmail.com

REPLY

We thank Auer et al. for their comments on our paper (1). Auer et al. would like to add atrial fibrillation (AF) after cardiac surgery to the list of cardiovascular disorders that are exacerbated by low serum potassium concentrations. Atrial fibrillation is a common and costly complication after cardiac surgery (2). It is significantly more common when serum potassium falls below 3.5 mmol/L, and avoidance of hypokalemia may reduce its incidence (3,4).

The stress of cardiothoracic surgery increases sympathetic tone, and this may predispose one to the development of AF. Interestingly, experimental evidence suggests that sympathetic activity reduces the arrhythmic threshold of hypokalemic dogs (5). This is unsurprising, given the data that link catecholamines with hypokalemia and the favorable effects of beta-blockade on the renin-angiotensin-aldosterone system (6,7).

Therefore, we agree that avoidance of perioperative hypokalemia in patients undergoing cardiothoracic surgery is likely to reduce the incidence of AF in this setting and avoid unnecessary morbidity and costs. A randomized controlled trial of targeted potassium repletion versus standard care is thus warranted.

John E. MacDonald, MBChB, MRCP
Dundee University
Clinical Pharmacology
Level Seven
Ninewells Hospital
Dundee, Scotland DD1 9SY
United Kingdom
E-mail: macdonald_je@hotmail.com

Reference:

We thank Auer et al. for their comments on our paper (1). Auer et al. would like to add atrial fibrillation (AF) after cardiac surgery to the list of cardiovascular disorders that are exacerbated by low serum potassium concentrations. Atrial fibrillation is a common and costly complication after cardiac surgery (2). It is significantly more common when serum potassium falls below 3.5 mmol/L, and avoidance of hypokalemia may reduce its incidence (3,4).

The stress of cardiothoracic surgery increases sympathetic tone, and this may predispose one to the development of AF. Interestingly, experimental evidence suggests that sympathetic activity reduces the arrhythmic threshold of hypokalemic dogs (5). This is unsurprising, given the data that link catecholamines with hypokalemia and the favorable effects of beta-blockade on the renin-angiotensin-aldosterone system (6,7).

Therefore, we agree that avoidance of perioperative hypokalemia in patients undergoing cardiothoracic surgery is likely to reduce the incidence of AF in this setting and avoid unnecessary morbidity and costs. A randomized controlled trial of targeted potassium repletion versus standard care is thus warranted.

John E. MacDonald, MBChB, MRCP
Dundee University
Clinical Pharmacology
Level Seven
Ninewells Hospital
Dundee, Scotland DD1 9SY
United Kingdom
E-mail: macdonald_je@hotmail.com

Reference:

We thank Auer et al. for their comments on our paper (1). Auer et al. would like to add atrial fibrillation (AF) after cardiac surgery to the list of cardiovascular disorders that are exacerbated by low serum potassium concentrations. Atrial fibrillation is a common and costly complication after cardiac surgery (2). It is significantly more common when serum potassium falls below 3.5 mmol/L, and avoidance of hypokalemia may reduce its incidence (3,4).

The stress of cardiothoracic surgery increases sympathetic tone, and this may predispose one to the development of AF. Interestingly, experimental evidence suggests that sympathetic activity reduces the arrhythmic threshold of hypokalemic dogs (5). This is unsurprising, given the data that link catecholamines with hypokalemia and the favorable effects of beta-blockade on the renin-angiotensin-aldosterone system (6,7).

Therefore, we agree that avoidance of perioperative hypokalemia in patients undergoing cardiothoracic surgery is likely to reduce the incidence of AF in this setting and avoid unnecessary morbidity and costs. A randomized controlled trial of targeted potassium repletion versus standard care is thus warranted.

John E. MacDonald, MBChB, MRCP
Dundee University
Clinical Pharmacology
Level Seven
Ninewells Hospital
Dundee, Scotland DD1 9SY
United Kingdom
E-mail: macdonald_je@hotmail.com

Reference:
mended as a preventive agent for cardiovascular episode in patients who are not resistant to aspirin by the criteria discussed by Gum et al. (1) and Eikelboom et al. (2). A simple method used by our group to establish aspirin resistance (3) is based on the determination of aggregated platelets in the circulation and its resolution by one week of aspirin therapy. This simple method can even be used as a bedside procedure. It may be a screening method used before introducing the spectrum of tests discussed by Eikelboom et al. (2). It is our impression that clopidogrel (75 mg one time daily) alone or in combination with aspirin (81 mg one time daily) is effective in possibly resistant patients. Data are being collected for eventual statistical evaluation.

Julian L. Ambrus, MD, PhD, FACP
State University of NY at Buffalo
Buffalo General Hospital/Kaleida Health System
100 High Street, Building E; Room 320
Buffalo, New York 14203
E-mail: jlambrus@netscape.net

Clara M. Ambrus, MD, PhD, FACP
Selina Akhter, MD, MA

REFERENCES