

EDITORIAL

Aspirin Resistance and Its Importance

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The use of salicylates (popularly known as aspirin or ASA) is well established for the secondary prevention of cardiovascular disease. However, there are reportedly a numer of patients who suffered repeat cardiovascular events despite being given aspirin "prophylaxis", and uncertainty prevails on whether or not this is due to an inherent inability of aspirin to sufficiently modify platelet activity or are there other mechanisms involved. Coined as "aspirin resistance", the condition warrants attention as an ineffective prophylaxis may lead to unexpected morbidity and subsequent disappointment.1

Therefore, it is important that patients who do not benefit from aspirin prophylaxis are identified. In Indonesia, a country with the fourth largest population in the world, with cerebrovascular disease as the top killer, the problem becomes more relevant as even a small percentage of the population goes a long way. However, several issues will have to be addressed: firstly, resistance (or sensitivity, for that matter) tests will have to take into account polymorphisms and ethnic characteristic – based on local population data; secondly, the test will have to be relatively simple and easy, covering a wide spectrum of health facilities.²

The report by Kurniawan, et al.³, a crosssectional study with the aim of obtaining the prevalence of ASA resistance utilizing the platelet function test, is an endeavour that merits a place in this editorial. It is simple but important as there has not yet been a descriptive study in Indonesia – for such a large population – that takes on a problem as relevant as this. Further studies will have to follow in its wake, and a lot more data are needed to identify and stratify the Indonesian population. But we have to start somewhere and this article is a good start.

Aspirin resistance, as a phenomenon, is real. It is a phenomenon that – in a number of metaanalyses - affects between 15 to 25 percent of the population, with a higher incidence in stroke patients. It has clinical consequences that burden the public health system, and addressing the issues involved will be a big contribution to the practice of medicine.

REFERENCES

- 1. Alberts MJ. Platelet function testing for aspirin resistance is reasonable to do. Stroke. 2010;41:2400-1.
- Shen H, Herzog W, Drolet M, et al. Aspirin resistance in healthy drug-naive men versus women (from the Heredity and Penotype Intervention Heart Study). Am J Cardiol. 2009;104:606-12.
- Kurniawan M, Harris S, Hermawan D, Prihartono J. Evaluating resistance to acetyl salicylic acid using platelet function test in patients with ischemic stroke at Cipto Mangunkusumo Hospital. Acta Med Indones-Indones J Intern Med. 2015;47(2):88-94.