

Inhibidores del receptor plaquetario P2Y₁₂. Parte 2 de 2: etiología, diagnóstico y manejo de la resistencia

Platelet P2Y₁₂ receptor inhibitors. Part 2 of 2:
Etiology, diagnosis and management of resistance

Germán Campuzano-Maya MD¹

Resumen: las enfermedades cardiovasculares, que comprenden las afecciones del corazón, del cerebro y de los vasos sanguíneos en general, representan la primera causa de muerte a nivel mundial con diecisiete millones y medio de muertes cada año, de los cuales una tercera parte se debe a eventos trombóticos. La antiagregación plaquetaria con diferentes agentes, incluidos los inhibidores del receptor plaquetario P2Y₁₂, se ha convertido en la piedra angular de la prevención primaria y secundaria y del tratamiento de las enfermedades cardiovasculares, entre ellas el infarto agudo de miocardio, la apoplejía y las enfermedades trombóticas. Sin embargo, varios estudios de investigación han demostrado que algunos individuos presentan disminución en la respuesta in vivo a estas sustancias, la cual se expresa como resistencia. En el primer módulo se abordó el papel de las plaquetas en la enfermedad aterotrombótica y se describieron los seis inhibidores del receptor plaquetario P2Y₁₂ disponibles para su uso clínico actual o a futuro: la ticlopidina, el clopidogrel, el prasugrel, el ticagrelor, el cangrelor y el elinogrel. En este segundo módulo se tratará el concepto de la resistencia a los inhibidores del receptor plaquetario P2Y₁₂ en particular al clopidogrel, la etiología de la resistencia y el monitoreo de la antiagregación con inhibidores del receptor plaquetario P2Y₁₂ mediante pruebas de función plaquetaria, como una manera de hacer una antiagregación personalizada; finalmente, se darán las pautas básicas para el manejo de la resistencia a los inhibidores del receptor plaquetario P2Y₁₂.

Palabras clave: antagonistas del receptor purinérgico P2Y, inhibidores de agregación plaquetaria, resistencia a medicamentos.

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¹ Médico, especialista en Hematología y Patología Clínica. Docente Ad Honorem, Facultad de Medicina, Universidad de Antioquia. Médico Director, Laboratorio Clínico Hematológico. Grupo de Investigación en Patología Clínica. Medellín, Colombia.

Correo electrónico: gcm@lch.co

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Abstract: Cardiovascular diseases, including in general affections of heart, brain, and blood vessels, are the leading worldwide cause of death with seventeen millions of deaths annually and a third part of them are due to thrombotic events. Platelet antiaggregation with different agents, like inhibitors of the platelet receptor P2Y₁₂, has become the cornerstone of primary and secondary prevention and for the treatment of cardiovascular diseases, as acute myocardial infarction, stroke, and thrombotic diseases. However, several research studies have shown a decrease in the in vivo response to these substances in some individuals, which is expressed as resistance. The first module addressed the role of platelets in atherothrombotic disease and described the six P2Y₁₂ platelet receptor inhibitors available for current or future clinical use: ticlopidine, clopidogrel, prasugrel, ticagrelor, cangrelor and elinogrel. In this second module, it will discuss the concept of resistance to P2Y₁₂ platelet receptor inhibitors, particularly clopidogrel, the resistance etiology, and antiplatelet monitoring with inhibitors of P2Y₁₂ platelet receptor by platelet function tests, as a way to make a «personalized antiaggregation». Finally, it will give the basic guidelines for the management of resistance to P2Y₁₂ platelet receptor inhibitors.

Key words: purinergic P2Y receptor antagonists, platelet aggregation inhibitors, drug resistance.