

# 合剤はMI後治療へのアドヒアランスを上昇させる (Presentation #5917)

FOCUS:新たな治療体制はより多くの患者が2度目の心筋梗塞を発症するのを予 防するのに有望である

FOCUS: Novel treatment regime has potential to prevent more patients having a second heart attack

新たな合剤は心筋梗塞(MI)後治療へのアドヒアランスを上昇させるとのスタディ結果が2014 年European Society of Cardiology Congressホットラインセッションで発表された。FOCUS2は MI後患者における固定用量の組み合わせ(アセチルサリチル酸[ASA]100mg、シンバスタチ ン40mg、ラミプリル2.5、5、または10mg を含むCNIC-FS (3)-FERRER合剤)へのアドヒアランス および心血管リスクファクターのコントロールに対する効果を調査した。計695人の患者が合剤 または3剤を別々に内服する群にランダムに割り付けられ、9か月間追跡された。患者は合剤と して与えられた方が3剤別々の錠剤として与えられた場合よりもMI予防の薬剤を内服する確率 が高かった。このスタディでは2つの方法を用いた。自己申告のアンケートでは、合剤群の患者 の68%が薬を内服していたのに比べ、3剤内服群では59%だけであった。錠数を確認すると、 合剤群の92%の患者が内服を順守したのに対し、別々に内服した群では84%であった。この新 たな治療体制は患者が2度目のMIを発症するのを軽減する可能性がある。

## Full Text

A new polypill increases adherence to treatment following a myocardial infarction (MI), according to results from the FOCUS Study presented for the first time at ESC Congress 2014. The novel treatment regime has the potential to prevent more patients having a

Dr. Valentin Fuster, MD, PhD, was lead author on the study. He is physician-in-chief at The Mount Sinai Hospital and director of Mount Sinai Heart, The Mount Sinai Health System, New York, US.

Dr. Fuster said "Despite continuous advances in all areas of cardiovascular (CV) medicine, cardiovascular disease (CVD) has steadily increased in prevalence to become the number one cause of death worldwide. It is estimated that half of the overall reduction in CVD mortality observed over the past 20 years in western countries could be attributed to appropriate use of CV medications for secondary prevention. But lack of adherence to treatment impedes adequate secondary prevention and contributes to the CVD pandemic."

He continued: "The most important factors responsible for a lack of adherence to treatment are the complexity of treatment and the daily number of prescribed pills. The idea of using a polypill for CVD prevention has gained increasing momentum because it could increase adherence and therefore contain the progression of CVD. A polypill bealthcare delivery, improve cost-effectiveness, support the comprehensive prescription of evidence-based cardioprotective drugs, and reach underdeveloped regions of the world."

The Fixed-dose Combination Drug for Secondary Cardiovascular Prevention (FOCUS 2) study was established to investigate adherence to The Fixed-dose Combination Drug for Sectionary Cartalovascular Prevention (FUCUS 2) study was established to investigate adnerence secondary prevention medication and test a new polypill. The study was conducted in two subsequent phases. FOCUS 1 included post MI patients in a multi-country comprehensive analysis of socioeconomic, comorbidity, and other factors that determine adherence to CV medications. FOCUS 2 was a randomized controlled clinical trial testing the effect of a fixed-dose combination (FDC), the CNIC-FS (3)-FERRER polypill, containing acetylsalicytic acid (ASA) 100 mg, simvastatin 40 mg and ramipril 2.5, 5 or 10 mg, on adherence and control of CV risk factors in post MI patients.

FOCUS 1 included 2 118 patients with a history of MI from five different countries (Spain, Italy, Argentina, Brazil and Paraguay). The degree of adherence to prescribed medications was calculated using the Morisky Green Adherence Questionnaire, a self-reported method with four questions on adherence behavior. The researchers found an average baseline adherence level of 45.5%.

The researchers also conducted a descriptive analysis of variables that impede adequate adherence. They found that patients below 50 years of age, those taking more than 10 pills, following a complex regimen (i.e. those taking medications other than orally), current smokers and those with sedentary lifestyles were significantly more non-adherent.

Dr. Fuster said "Importantly, there was a significant trend towards more non-adherence with a higher score of depression (as measured by the PHQ-9 questionnaire). Of the socio-demographic variables, illiteracy level, lower social support and lower percentage of insurance cover showed significantly lower levels of adherence as well as those patients being treated by general practitioners (as opposed to cardiologists) and being treated in a private center(as opposed to a public health center)."

In a stepwise forward regression model, FOCUS 1 found that the risk of being non-adherent was independently associated with younger age (under 50 years old), scoring high on the depression scale, and following a complex (administrations other than oral) treatment. On the other hand, the odds of being adherent increased with higher percentage of health insurance coverage, and with optimal levels of social

In FOCUS 2, a total of 695 patients were enrolled from four countries and followed for a period of nine months. Patients were randomized to receive either the polypill or the three drugs separately. Adherence was measured with two methods: self-reported adherence using the Morisky Green Adherence Questionnaire as well as a direct method, the pill count.

Dr. Fuster said "Patients were more likely to take their medication to prevent a heart attack when it was given as a polypill, rather than as three separate pills. We found this using two methods. With the self-reported questionnaire, 68% of patients in the polypill group took their drugs compared to just 59% of patients in the group assigned to three drugs. With the pill count, we found that 92% of patients in the polypill group were adherent compared to only 84% in the group assigned to separate drugs."

He added: "FOCUS 1 has identified the reasons that impede appropriate adherence to CV medications in a post MI population from five different countries. FOCUS 2 has shown that, compared with the three drugs given separately, the use of a pobpill strategy significantly increases self-reported and directly measured medication adherence for secondary prevention following an acute MI. FOCUS 2 is ongoin and will assess whether there are any differences between the two treatment arms in blood pressure, blood cholesterol, safety or costs."

Dr. Fuster concluded "Our results suggest that the polypill has the potential to prevent more patients having a second heart attack. A randomized trial is needed to test whether the improved adherence with the polypill found in FOCUS results in fewer post MI patients having another MI."

Dr. Valentin Fuster, MD, PhD, is physician-in-chief at The Mount Sinai Hospital and director of Mount Sinai Heart, The Mount Sinai Health System, New York, US. He is also general director of the Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC) in Madrid,

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