Serelaxinは心不全の院内増悪を軽減する（Presentation #3801）

RELAX-AHF：静注薬が入院後5日以内の心不全増悪発現率を低下させる

RELAX-AHF: Intravenous drug reduces incidents of worsening heart failure during first 5 days of hospitalization

Serelaxinは急性心不全で入院した患者の院内心不全増悪をほぼ半減させるとの研究結果が2014年European Society of Cardiology Congressホットラインセッションで発表された。RELAX-AHFは、急性心不全で入院した患者1,161人に静注薬serelaxinの48時間投与を行い臨床上の予後を評価したランダム化二重盲検コントロールトライアルであった。Serelaxinによる初期徴候や心不全症状の改善および死亡率低下は既にRELAX-AHFトライアルで報告されている。今回の解析では、serelaxin群とプラセボ群における入院後5日以内の心不全増悪発現を比較した。その結果、入院後5日以内に心不全増悪エピソードを発現したのは標準治療群患者の12.2%であったのに対し、serelaxin治療群では6.7%であった。心不全増悪エピソード再発もまたserelaxinにより減少し、結果として心不全増悪または死亡イベントはプラセボ群で計87件であったのに対し、serelaxin治療群では43件であった。

Full Text

Serelaxin reduces the occurrence of in-hospital worsening heart failure by almost half in patients admitted for acute heart failure, according to results from the RELAX-AHF trial presented during a Hot Line session at the 2014 European Society of Cardiology Congress. The results were presented for the first time at ESC 2104 Congress by co-principal investigator Professor John R. Teerlink.

Professor Teerlink said "Serelaxin is a synthetic version of the naturally occurring hormone, relaxin, which is present in small amounts in both men and women. It is produced in large quantities during pregnancy, where it is believed to improve blood vessel, kidney and heart function. These beneficial effects in pregnancy provided the basis for studying serelaxin in patients with heart failure, where there are abnormalities in these functions."

RELAX-AHF was a randomized, double blind controlled trial that evaluated the effects of a 48-hour infusion of the intravenous drug, serelaxin, on clinical outcomes in 1,161 patients admitted to hospital for acute heart failure. Improvement in the initial signs and symptoms of heart failure, as well as reduced mortality, has already been reported with serelaxin from the RELAX-AHF trial.

The current analysis compared the serelaxin and placebo groups for the occurrence of worsening heart failure within the first 5 days of admission to hospital. The investigators found that within the first five days of admission, 12.2% of patients treated with standard of care had an episode of worsening heart failure, compared to 6.7% in patients treated with serelaxin.

Serelaxin also reduced the occurrence of repeated episodes of worsening heart failure, resulting in a total of 87 worsening heart failure or death events in the placebo group compared to 43 such events in the serelaxin-treated patients. This reduction of worsening heart failure events by serelaxin was evident in patients regardless of the type or intensity of rescue therapies administered. For example, twice as many patients treated with standard care therapies had worsening heart failure requiring new intravenous therapies, doubling of their diuretic dose or mechanical support, compared to those treated with serelaxin.

Professor Teerlink, who is director of heart failure at the San Francisco Veterans Affairs Medical Center, University of California San Francisco, USA, said "These findings demonstrate immediate improvement in the patient's clinical course with serelaxin treatment and also support the earlier finding of an improvement in 180-day mortality with a 48-hour infusion of serelaxin. We are attempting to confirm the findings of improved survival with serelaxin in the ongoing RELAX-AHF-2 trial."

He added: "Patients admitted to hospital for heart failure can experience worsening heart failure despite current therapies, resulting in increased symptoms such as shortness of breath or a sense of drowning in their own fluids. It is difficult to predict who will have worsening heart failure, and these events are not only immediately very discomforting to the patient, but also have other important adverse impacts."

The current analysis also found that patients with worsening heart failure required intravenous medications for a longer time and spent an average of five and eight days longer in intensive care units and the entire hospitalization, respectively. Additionally, these patients had increased markers of heart injury and kidney dysfunction, as well as persistent congestion, compared to patients who did not experience worsening heart failure.

Professor Marco Metra, director of the Institute of Cardiology at the University and Civil Hospital of Brescia, Italy and co-principal investigator of RELAX-AHF, said "We have reported that all of these adverse effects of a worsening heart failure event are related to increased overall mortality and that a worsening heart failure event itself is related to a two-fold increased risk of dying in 180 days."

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