

遅れて施行する血管形成術の価値

CARESSスタディの結果、緊急の血栓溶解療法施行後に転送し血管形成術を施行することにより急性心筋梗塞患者の生存率が改善することが示された

CARESS study shows that immediate thrombolysis followed by transfer for emergent angioplasty improves survival of patients with acute myocardial infarction

CARESSスタディの結果、血管形成術の設備のない施設に収容された急性心筋梗塞患者は緊急の血栓溶解療法を施行した後に転送させるべきである、と European Society of Cardiologyで発表された。患者らはabciximabおよび低用量のreteplaseを投与された後、転送される群または同じ病院で継続して治療を受ける群に無作為に割り付けられた。その結果、転送され冠動脈形成術を受けた患者（最初の病院で改善が得られず後に転送された保存的治療群の36%を含む）は、30日後の主要な有害事象を発生しない確率が高かった（4.1%対11.1%）。血栓溶解療法から血管形成術施行までの時間はほとんどの患者において120分を超えており（中央値136分）、つまり彼らはprimary血管形成術の候補ではなかった。これらの結果および出血の合併症が少ない（3.7%で群間差なし）ことから、大規模医療施設の近くに住んでいない多くの患者に対して血栓溶解療法後の血管形成術は有用である可能性が示唆された。

Full Text

The CARESS study shows that patients with acute myocardial infarction admitted to a facility unable to perform angioplasty have better outcomes if transferred to an appropriate facility immediately after receiving thrombolytic therapy, according to a presentation at the annual meeting of the European Society of Cardiology.

The trial, conducted in Italy, Poland and France, involved various networks of community hospitals referring to a larger hospital for direct angioplasty of acute myocardial infarction. Patients were randomized with telephone allocation at the time of admission with all adverse events blindly reviewed by an independent Committee for adjudication and all electrocardiograms and angiograms analyzed by an independent Core Laboratory unaware of the treatment received.

The interval between administration of the thrombolytic drug and angioplasty was greater than 120 minutes in more than half of the patients (median, 136 minutes), which meant they were not candidates for primary angioplasty under current guidelines that require an interval of less than 90 minutes between first qualified medical contact and direct angioplasty.

The concern regarding thrombolysis before angioplasty was challenged by our finding of a low incidence of bleeding (0.8 percent intracranial hemorrhages and 2.9 percent bleeding episodes requiring 1 or more transfusions, with no difference between patients transferred for immediate angioplasty and patients who remained in the hospital of initial admission).

In our view, the lower rate of bleeding complications was due to the inclusion of patients at low risk of bleeding (patients less than 75 years old and well screened for contraindications to thrombolytics). We excluded older patients or patients with high bleeding risk from this trial because we believed in those cases it was more reasonable to pursue a less aggressive pharmacological strategy (for instance using only abciximab) or primary angioplasty.

Patients who were transferred and received angioplasty immediately after thrombolytics were much more likely (4.1 percent vs. 11.1 percent at 30 days) to be free from adverse events such as death, new myocardial infarction, new acute episode of chest pain, and electrocardiographic changes requiring urgent angioplasty.

This advantage was present despite the fact that all patients (36 percent of the entire conservative group) randomized to the group of more conservative treatment (no immediate transfer) were also promptly referred during the first hours post-treatment if there was no evidence that the lytic drugs had opened the occluded artery.

CARESS used a combination of the powerful intravenous anti-platelet agent abciximab and a reduced dose of the fibrin-specific lytic drug reteplase. This combination is very powerful and rapid in its action, with a synergistic effect demonstrated in previous trials and in in-vitro models, and achieved restoration of flow in the occluded artery in 85 percent of cases by the time patients reached the hospital where angioplasty was performed. Its main advantage is, however, the ability to inactivate platelets during the subsequent angioplasty, the opposite of the result observed when only lytics are given, which tend to activate platelets instead.

The authors conclude that the results should lead to a more liberal use of a strategy of facilitated angioplasty (that is, thrombolytics before angioplasty) when there is no certainty that the angioplasty can be performed within 90 minutes.

Conference

News

[News Flash 01]

急性心不全の管理に関する知見

[News Flash 02]

遅れて施行する血管形成術の価値

[News Flash 03]

糖尿病患者における心血管リスクの管理

[News Flash 04]

末梢動脈の動脈硬化と心血管死亡率

[News Flash 05]

直接的なレニン阻害と心不全

[News Flash 06]

冠動脈造影前の抗凝固療法

[News Flash 07]

急性心原性肺水腫における非侵襲的呼吸補助

[News Flash 08]

経皮的僧帽弁修復術の可能性

[News Flash 09]

薬剤溶出ステントと急性冠症候群

[News Flash 10]

心室性不整脈の軽減

[News Flash 11]

ステント血栓症に関するさらなる情報

[News Flash 12]

薬剤溶出ステントに関する性特異的な情報

[News Flash 13]

遅発性ステント血栓症に関する死体解剖から得られた情報