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Unprotected left main revascularization in patients with acute coronary syndromes

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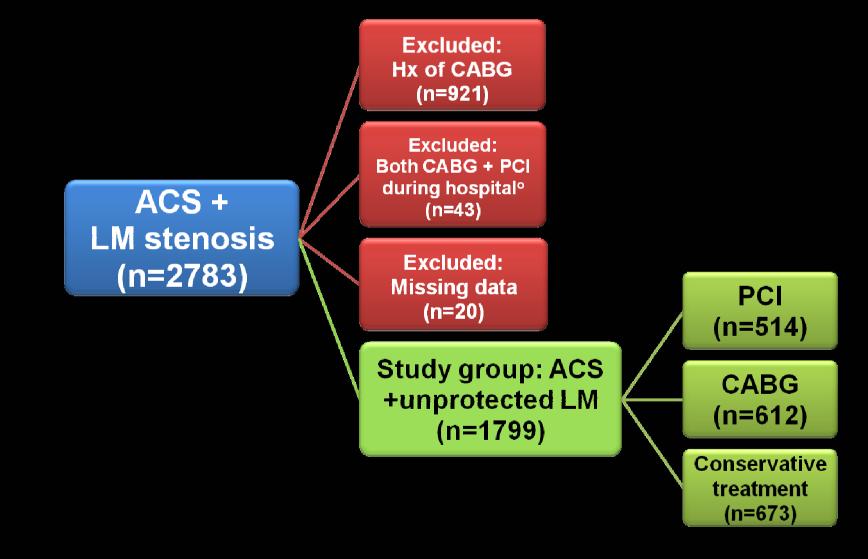


Background

- Limited information on revascularization for unprotected left main coronary disease (ULMCD):
 - → a few randomized studies performed in stable patients
 - → a limited number of small observational studies
- We explored the treatment strategies applied to ULMCD in:
 - → Unstable patients (ACS)
 - → Emergency (e.g. STEMI)
 - → Serious cases (e.g. shock, cardiac arrest)
- GRACE registry: Data from 106 hospitals in 14 countries in North and South America, Europe, Australia, and New Zealand, between 2000 and 2007 (www.outcomes.org/grace)

Study Flow Diagram

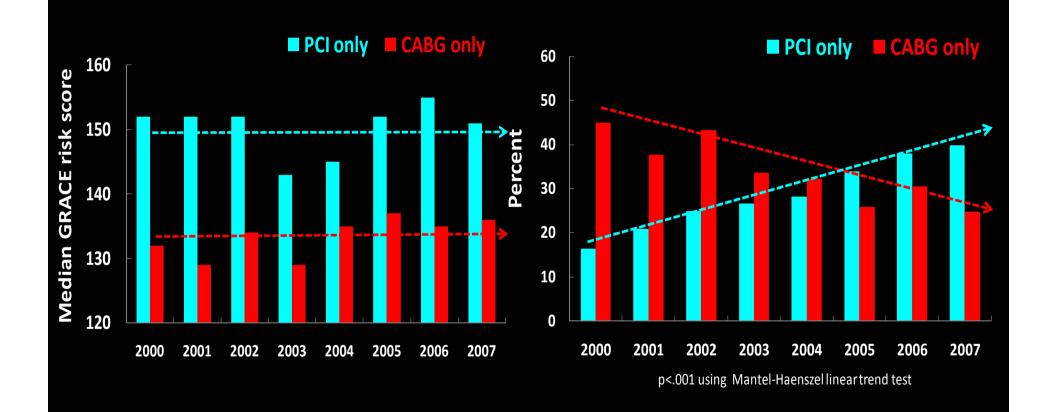
Analysis based on 43 018 patients



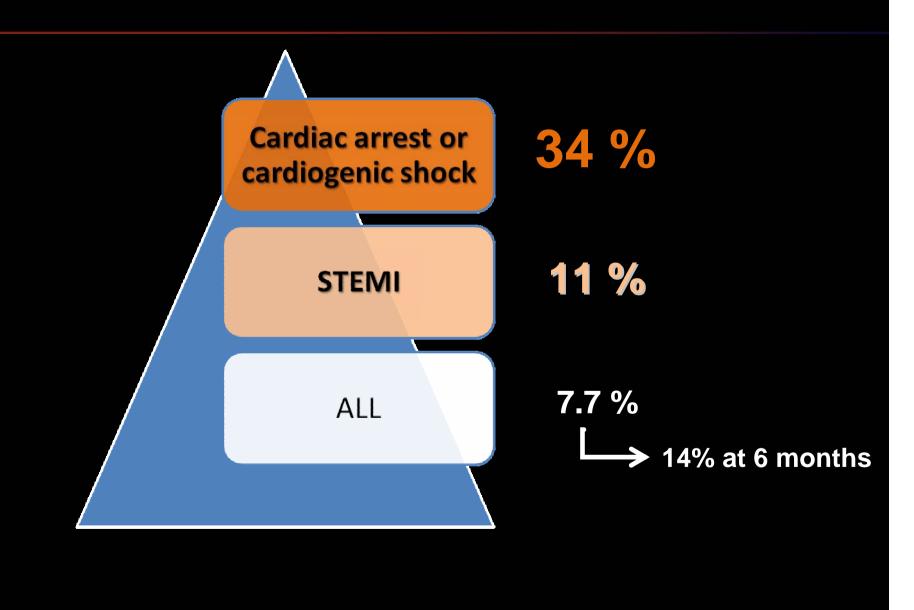
ULMCD Revascularization in ACS

Temporal Trends in Severity of ACS

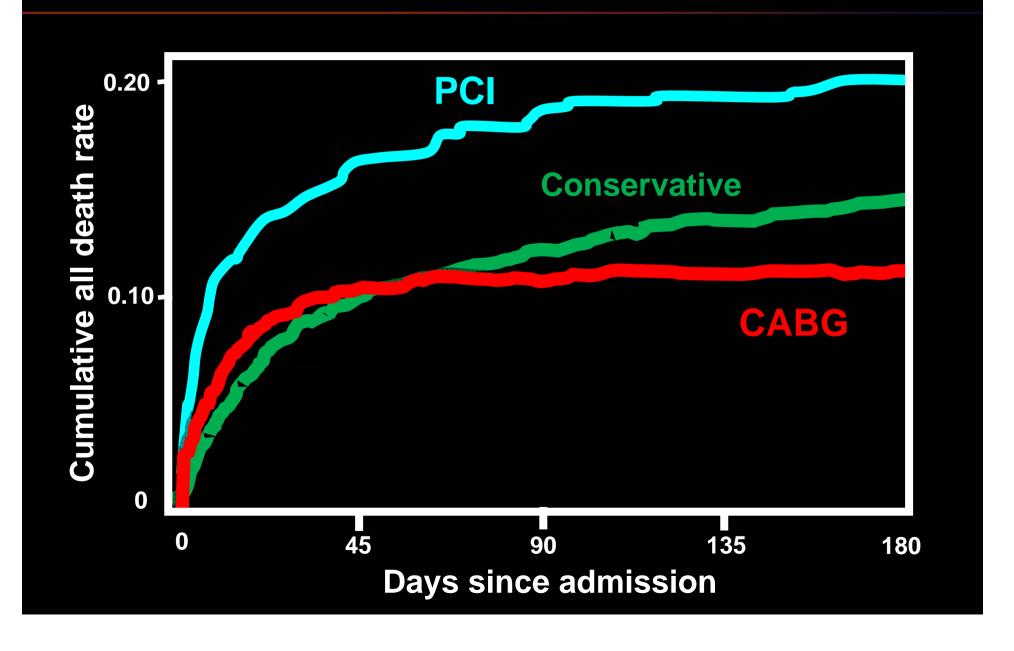
Temporal Trends in Type of Revascularization



In-Hospital Mortality



Cumulative Death Rate by Revascularization Group as a Time-Varying Covariate



Cox Regression Model for Death

Hospital stay

→ early hazard of revascularization

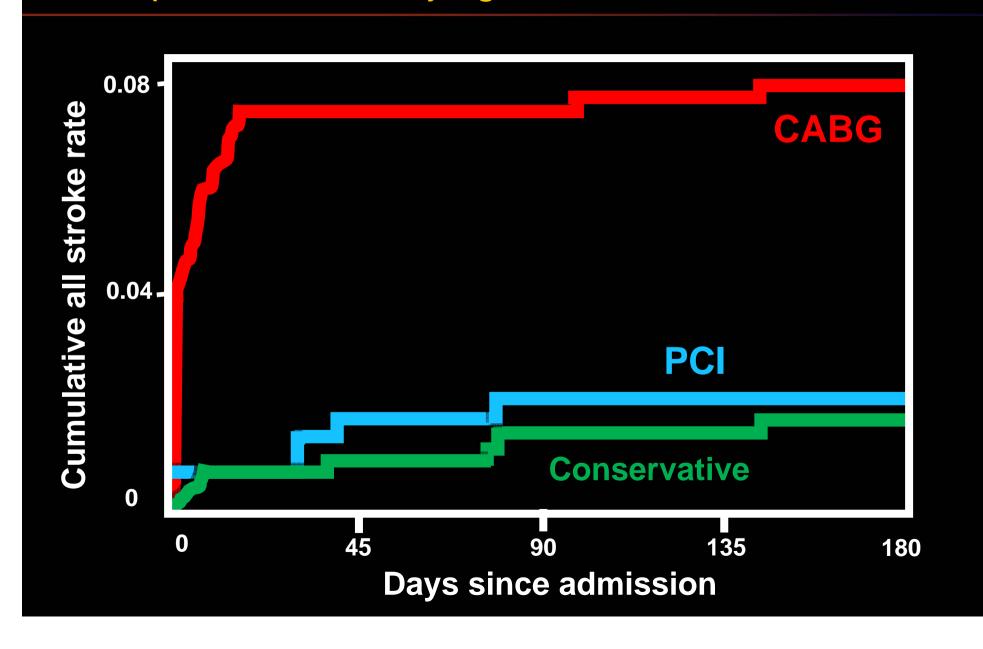
PCI vs. Conservative: HR 2.60 (95% CI 1.62-4.18) CABG vs. Conservative: HR 1.26 (95% CI 0.72-2.22)

From Discharge to 6 months

→ improved survival of revascularization

PCI vs. Conservative: HR 0.45 (95% CI 0.23-0.85) CABG vs. Conservative: HR 0.11 (95% CI 0.04-0.28)

Cumulative Rate of Stroke by Revascularization Group as a Time-Varying Covariate



Conclusion

- ULMCD in ACS is a rare situation (4%)
- ULMCD in ACS is a serious situation (in-hospital mortality of 7.7%)
- PCI has become the most common strategy of revascularization (is preferred in emergent/serious cases)
- CABG is associated with good survival (is performed in lower-risk patients)
- The 2 modes of revascularization appear complementary