

## MYOCARDIAL ISCHEMIA AND INFARCTION

## EFFECT OF PROTON PUMP INHIBITORS ON OUTCOME OF PATIENTS DISCHARGED ON DUAL ANTIPLATELET THERAPY AFTER PERCUTANEOUS CORONARY INTERVENTION AND STENT IMPLANTATION

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**Background:** Routine prescription of proton-pump-inhibitors (PPI) in addition to clopidogrel and aspirin might be essential for prevention of gastrointestinal complications. However, it has been suggested that PPI might reduce the effect of clopidogrel and increase the risk of adverse thrombembolic events.

**Methods:** One thousand two hundred ten patients under dual antipaletet therapy, who underwent percoutaneous coronary intervention (PCI) and stent implantation, were included in a prospective registry from January 2003 until December 2006. The patients were divided retrospectively into those under PPI therapy and those without PPI. All-cause mortality and the combined endpoint all-cause death or stent thrombosis were evaluated over a follow-up period of 7,77 (± 3,63) months (range 1-12 months),

**Results:** Six hundred ninety one patients (56,8%) received PPIs at discharge while 519 patients (42,7%) were discharged without PPIs. Significant differences between the two groups existed for gender (male sex with PPI: 65,4% vs. without PPI: 72,6%, p=0,007), diabetes mellitus (with PPI: 18,7% vs. without PPI: 26%, p=0,002), acute coronary syndrome at presentation (with PPI: 52,2% vs. without PPI 34,3%, p<0,001) and use of drugeluting stent (DES) (with PPI: 36,5% vs. without PPI: 29,5%, p=0,011).

All-cause mortality and the combined endpoint all-cause death or stent thrombosis did not differ significantly with respect to use or non-use of PPI therapy (2,2% vs. 2,1%, p=0,76 and 2,9% vs. 2,5%, p=0,69, respectively). After using the propensity score analysis to reduce the selection bias, there was no significant difference between the two groups with respect to all-cause mortality and the combined endpoint (2% vs. 2,2%, p=0,88, 2,7% vs. 2,5%, p=0,69 respectively). Even in different subgroups of patients e.g. acute vs. elective, bare metal stent vs. DES, had concomitant PPI-therapy no significant influence on outcome.

**Conclusions:** Our data suggest that the combination of dual antiplatelet therapy with proton-pump inhibitors obviously does not significantly influence thrombembolic events.