President's Page

Stent Wars

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There is no doubt that percutaneous coronary intervention (PCI) has contributed considerably to advances in the treatment of acute coronary syndromes. Particularly in the case of acute myocardial infarction or unstable angina, primary PCI preserves the myocardium at risk and improves the patient's early and late survival.

The introduction of drug-eluting stents (DES) was considered as a step forward, since the complication of in-stent restenosis was limited to less than 10% of cases.[1,2] Unfortunately, recent multi-centre clinical trials showed that, despite the improvement of in-stent restenosis, the complication of late stent thrombosis occurred in relatively high percentages in DES.[3-5]

However, the latest reports show that the occurrence of late stent thrombosis is rather similar to that of bare-metal stents (BMS).[6] The investigators tend to believe that those favourite results are attributable to the prolongation of combined antiplatelet therapy with aspirin and clopidogrel to more than one year. For instance, according to a three-year follow-up Swedish study[7] of 19,771 patients who underwent coronary stent implantation, overall mortality at three years was significantly higher in patients with DES compared to those with BMS. However, the update of the SCAAR[6] database presented two months ago at the 2007 Annual Congress of the European Society of Cardiology, which included 35,266 patients with a follow-up of four years, showed that in contrast to the previously published three-year data, the overall death rate no longer differed between DES and BMS patients. Better patient selection, improvements in stenting technique and, mainly, the increased awareness of the risk of late stent thrombosis in DES patients are the potential reasons.

In view of these latest developments, additional studies are needed in order to clarify exactly what is the situation. However, even if future trials show that DES behave in the same way as bare-metal stents in terms of late stent thrombosis, the issue of haemorrhagic complications and of other side effects resulting from chronic antiplatelet therapy will still remain. For this reason the use of stents according to guidelines has a pivotal role.

References

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