Importance of ethnic differences in affecting the outcomes of international trials

As cardiological trials become globalized, significant geographic variations in clinical outcomes become apparent, as was pointed out by the InTIME-II study[1] and the accompanying editorial by van de Werf[2]. The latter[2] enumerated several factors among which ethnicity was thought to be an important demographic determinant of outcome. Van de Werf put forth the conjecture that ‘lower doses of fibrin specific agents are probably (my italics) sufficient in Asian patients.’[2]

The last supposition was recently confirmed by the TPA/Urokinase Comparisons in China (TUCC) trial[3]. In that exclusive Chinese population of patients with acute myocardial infarction, a reduced dose of only 50 mg of recombinant tissue plasminogen activator (rtPA) produced infarct-artery patency (flow grades 2 or 3 according to the Thrombolysis In Myocardial Infarction grading system[4]) of 79%, equivalent to rates achieved with 100 mg in Western populations[3]. Furthermore, the TUCC trial proved that reduced-dose rtPA was superior to standard-dose urokinase therapy, both in patency and resultant left ventricular function, without producing significantly augmented rates of bleeding complications[3]. The same was true with regard to the dosage of warfarin required for anticoagulant therapy in Chinese patients[5].

Therefore, as van de Werf[2] concluded, ‘in future worldwide trials of fibrinolytic therapy more data need to be collected regarding the socio-economic and ethnic background of the patients enrolled’.

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References