after the start of the TCCS monitoring. Higher recanalization rates at 6 and 24 hours after stoke onset were also seen compared to controls (69.2% vs. 7.7% and 92.3% vs. 61.5% complete recanalizations resp., $p < 0.05$). Independence (mRS 0-2) at day 90 was achieved by 61.5% of the Thrombotripsy patients and 32.7% controls, $p < 0.05$, OR 1.88 (95% CI = 1.23 – 2.90). In both groups, 2 symptomatic intracerebral hemorrhages and 1 symptomatic brain edema occurred.

In our last study, we monitored the changes in haemocoagulation parameters in 10 healthy volunteers after a thrombotripsy with 1-hour transcranial Doppler (TCD) monitoring.

After a thrombotripsy of the MCA, PAI-1 antigen, tPA antigen, fibrinogen, and AP activity were significantly decreased in 9 of 10 volunteers by a mean of 32, 23, 7, and 4% respectively ($p < 0.05$ in all cases), with normalization of values during the ensuring 24 hours. After a thrombotripsy of the RA, there was a significant decrease in tPA antigen alone by an average of 14% ($p < 0.05$). The time of ECL was prolonged by 15.2% ($p = 0.05$) 24 hours after thrombotripsy of the MCA. No changes in the levels of the other measured factors were detected. Standard NSE did not affect any of the measured factors.

MARTIN DENIS

Prevention of venous thromboembolism after stroke

Department of Clinical Neurosciences, University of Edinburgh Edinburgh, UK

Deep vein thrombosis affects a significant minority of acute stroke patients in hospital. It may be complicated by pulmonary embolism which is one of the most important preventable causes of death after stroke. Prophylactic treatment which reduce the risk of DVT, and therefore presumably pulmonary embolism, should be offered in all stroke units. However, it is far from clear what those treatment should include. There are wide variations in the prophylaxis offered between units. Such variation is important since it suggests that many patients may be receiving suboptimal care and thus are exposed to an unnecessarily high risk of venous thromboembolism. Prof Martin Dennis will discuss the policies and the evidence for them.

ALE ALGRA

An update on secondary stroke prevention with antithrombotic drugs

University Medical Centre Utrecht, Netherlands

The presentation will be twofold: on secondary prevention after cerebral ischaemia of arterial origin (CIAO) and a cardiac source (CICO). The major trial after CICO is the EAFT that showed the superiority of mild oral anticoagulation (INR 2-3) over aspirin and placebo. Despite several more recent trials (e.g. SPORTIF and ACTIVE-W) the current standard remains mild anticoagulation. After CIAO several trials tried to improve the 13% relative risk reduction achieved with aspirin. Attempts with oral anticoagulation were disappointing: high INRs were not safe (SPIRIT), low INRs not effective (WARSS) and with a mild regimen (INR 2-3) the benefits for ischaemic events were cancelled by more major bleedings. Clopidogrel tended to be modestly more effective than aspirin after stroke (CAPRIE), but its combination with aspirin appeared to be not safe (MATCH, CHARISMA). Combination of aspirin with dipyridamole, however, appeared to be safe and to be more effective than aspirin alone (ESPS-2, ESPRIT). A recent update of guidelines of the American Heart Association now recommend the combination of aspirin and dipyridamole over aspirin alone.