Position and Mobilisation Post-Angiography Study (PAMPAS): a comparison of 4.5 hours and 2.5 hours bed rest

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RESULTS

A total of 755 patients were randomised; 50 patients withdrew from the study, leaving 362 in group A and 343 in group B. Baseline demographic and basic medical data were comparable for the two groups. Details of the arterial puncture and compression after the procedure were also similar. The mean time to sit-up was 238 mins (group A) vs 71 mins (group B) (p < 0.01) and time to mobilisation was 273 mins (group A) vs 167 mins (group B) (p < 0.01). There were no deaths. One patient (0.3%) developed a false aneurysm and required late surgical repair in each group (p = 0.96). There was no excess of other vascular complications in group B (table 1). There were significantly fewer reports of pain or discomfort at all times before hospital discharge in group B than in group A. There was no difference in the time to discharge between both groups, as specified in the study protocol.

DISCUSSION

This study is one of the largest prospective, randomised, controlled trials addressing the question of early mobilisation following angiography to date. It shows that, following successful 6 French left heart catheterisation via the femoral artery, sit-up at 1 hour and mobilisation at 2.5 hours is at least as safe as sit-up at 4 hours and mobilisation at 4.5 hours. There was no significant excess of any complication with this regimen, and there were no life threatening events. Only one patient (0.3%) required surgical arterial repair in each group.

The number of patients reporting pain and discomfort was lower in the rapid sit-up and mobilisation group. One of the most common complaints of patients undergoing invasive procedures via the femoral artery is backache induced by lying flat. Rapid sit-up (particularly) and mobilisation are, therefore, beneficial not only from a health economics standpoint, but also from that of patient comfort.
There is no reason why the time intervals for mobilisation in our study should be regarded as the ultimate achievable; we have simply “moved the target” forward for future study. Indeed, with 5 French and 4 French diagnostic catheters now the norm in our institution, even shorter mobilisation times may be possible. At least there is now a sound evidence base for centres using 6 French diagnostic catheters to move to a strategy of 1 hour sit-up plus 2.5 hour mobilisation. Furthermore, the manifest safety of such short sit-up and mobilisation times calls into question the role of sealing devices and alternative arterial access sites in the majority of patients undergoing routine diagnostic catheterisation.

Our results could be extended to earlier discharge from hospital. This was not done in our study (so that any late complications in the early mobilisation group could be detected). Because of the lack of excess complications in the early mobilisation group, however, there would seem to be no reason not to move towards earlier hospital discharge for all.

In conclusion, we have shown that early sit-up (1 hour) and mobilisation (2.5 hours) after routine, elective, 6 French left heart catheterisation via the femoral artery, with manual arterial compression, is as safe as sitting up at 4 hours and mobilisation at 4.5 hours.

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IMAGES IN CARDIOLOGY

An unusual complication of transvenous temporary pacing

A 63 year old woman was admitted with an inferior myocardial infarction complicated by complete heart block. A transvenous temporary pacing wire was inserted via the right subclavian vein and the procedure proceeded without problem. Chest x ray on completion of the procedure is shown below and the wire position appeared reasonable. She was pacing satisfactorily, however, with a right bundle branch block pattern and we therefore arranged for her to have an echocardiogram. Her echocardiogram revealed the pacing wire to have crossed the interventricular septum and lie in the left ventricle as shown.

The temporary wire was removed without difficulty and the patient went on to have a permanent pacing system inserted several days later without further complication.

REFERENCES

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