APPENDIX 6

REFRACTORY ANGINA

Diagnosis

i) Requires a cardiological and cardiothoracic surgical opinion that the patient has angina of ischaemic origin and that revascularisation is unfeasible. Regular angiographic review is recommended to exclude the development of 'new' revascularisable disease.

ii) Outpatient assessment to include: Review of pain history and physical exam. It is essential to ensure that the patient has failed to respond to maximum tolerable medication. Poor compliance should be considered and the need for compliance explained. Simplification of the drug regimen is recommended.

i) Exclude non-cardiac causes e.g. costochondritis, intercostal neuralgia, anaemia, thyrotoxicosis, reflux oesophagitis (consider trial of proton pump inhibitors)

ii) It is important to consider the possibility that depressive disease may contribute a significant component to their total pain experience. The HAD questionnaire is a simple screening tool that can help to identify patients who might benefit from psychiatric or psychological assessment.

Management

1 Outpatient counseling to include explanation of management plan, lifestyle advice (diet, smoking, physical activity. A realistic and achievable 'pain contract' should be decided on so that the patient, their family and the clinical treatment team have an agreed objective.

2 Rehabilitation. Based on recommended guidelines: involving exercise programme, lifestyle advice, relaxation training.

3 Multidisciplinary cognitive behavioural pain management programme. If appropriate-based on established psychological assessment methods e.g. Hospital Anxiety and Depression score. A formal psychological assessment can be of value especially in determining whether formal psychotherapy may be of value.

4 Transcutaneous electrical nerve stimulation (TENS)

5 Temporary sympathectomy. Stellate ganglion block. T3/4 paravertebral block in stages. High thoracic epidural. Based on the Liverpool protocol.

6 Spinal cord stimulation (SCS). Implant data and outcome should be recorded in a registry.

6 Opioids. There is limited evidence of the effectiveness of opioids in refractory angina. In clinical practice oral and transdermal opioids can be effective. Trial of epidural followed by intrathecal opioids might be beneficial.

7 Destructive sympathectomy. Thoracoscopic, surgical, phenol depending on local expertise.

Myocardial laser (percutaneous or transmyocardial). There is insufficient data to support this therapy outside clinical research. We recommend that these therapies should only be undertaken as part of a formal clinical trial.