

DUNDEE ADVANCED INTERVENTIONS SERVICE
ANNUAL REPORT AND SUMMARY OF ACTIVITY: 06 APRIL 2006 TO 06 APRIL 2007

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1. INTRODUCTION

Depression will affect approximately 15% of individuals during a lifetime and 20% of those will have an illness that lasts longer than two years. The disorder results in a major economic burden upon society and many sufferers will eventually commit suicide. A small minority of patients have illnesses that do not respond to all available treatments. Obsessive-compulsive disorder (OCD) affects around 1-3% of the population, and for some people it is a chronic, disabling disorder.

The Dundee Advanced Interventions Service comprises a small, highly-skilled team offering multi-disciplinary assessment and treatment for severe, chronic and treatment-refractory depression (TRD) and OCD.

All patients undergo comprehensive assessment before individualised treatment recommendations are made. A small number of individuals will be offered more specialist treatments which range from Vagus Nerve Stimulation (VNS) to Anterior Cingulotomy (ACING), a stereotactic neurosurgical procedure for chronic depression and OCD. The team has expertise in a wide range of psychological therapies including Cognitive Behavioural Therapy (CBT), Exposure and Response Prevention (ERP), and Cognitive Behavioural Analysis System of Psychotherapy (CBASP). For those patients where previous psychological treatment of OCD has failed, the service is able to offer bespoke programmes of inpatient ERP.

2. ACTIVITY DATA

2.1 OVERVIEW

	Actual	Planned
Assessments	43	24
Vagus Nerve Stimulation	0	7
Anterior Cingulotomy	4	5
Follow-up	11	12

2.1.2 FOLLOW-UPS

Follow-ups (ACING): 4

Follow-ups (VNS): 7

2.2 REFERRALS

2.2.1 REFERRALS RECEIVED

Total number of patients: 44

2.2.2 DEMOGRAPHIC INFORMATION

Male: 18

Female: 26

M:F ratio: 1:1.4

2.2.3 REFERRING NHS ORGANISATION

NHS Organisation	Country	No. of Referrals
<-- Non-GB Health Authority -->	N/A	1
Borders Primary Care NHS Trust	Scotland, UK	1
County Durham and Darlington Priority Services NHS Trust	England, UK	1
Coventry Primary Care Trust	England, UK	1
Devon Partnership NHS Trust	England, UK	1
Fife Acute Hospitals NHS Trust	Scotland, UK	3
Fife Primary Care NHS Trust	Scotland, UK	9
Forth Valley Primary Care NHS Trust	Scotland, UK	1
Grampian Primary Care NHS Trust	Scotland, UK	5
Greater Glasgow Primary Care NHS Trust	Scotland, UK	1
Highland Primary Care NHS Trust	Scotland, UK	3
Newcastle, North Tyneside and Northumberland Mental Health NHS Trust	England, UK	1
NHS Lothian - Primary & Community Division	Scotland, UK	3
NHS Tayside - Primary Care Division	Scotland, UK	2
Oxfordshire Mental Healthcare NHS Trust	England, UK	1
Tayside Primary Care NHS Trust	Scotland, UK	10
Tees, Esk and Wear Valleys NHS Trust	England, UK	1

2.3. ASSESSMENTS

2.3.1 DIAGNOSIS OF PATIENTS ASSESSED

Diagnosis	No. of patients
F01.1 Multi-infarct dementia	1
F06.31 Organic bipolar disorder	2
F25.2 Schizoaffective disorder, mixed type	1
F31.1 Bipolar affective disorder, current episode manic without psychotic symptoms	2
F31.3 Bipolar affective disorder, current episode mild or moderate depression	6
F31.7 Bipolar affective disorder, currently in remission	1
F31.8 Other bipolar affective disorders	1
F32.1 Moderate depressive episode	3
F32.2 Severe depressive episode, without psychotic symptoms	2
F32.3 Severe depressive episode, with psychotic symptoms	2
F33.0 Recurrent depressive disorder, current episode mild	2
F33.1 Recurrent depressive disorder, current episode moderate	2
F33.2 Recurrent depressive disorder, current episode severe without psychotic symptoms	1
F33.3 Recurrent depressive disorder, current episode severe with psychotic symptoms	1
F33.4 Recurrent depressive disorder, currently in remission	1
F40.1 Social phobia	1
F41.1 Generalised anxiety disorder	1
F42.0 Obsessive compulsive disorder, predominantly obsessional thoughts or ruminations	1
F42.2 Obsessive compulsive disorder, mixed obsessional thoughts and acts	5
F60.31 Emotionally unstable personality disorder - borderline type	2
F60.8 Other specific personality disorder	1
F60.9 Personality disorder, unspecified	1
F61.0 Mixed personality disorder	3
Total	43

2.3.2 REFERRING NHS ORGANISATION

NHS Organisation	Country	No. of assessments
<-- Non-GB Health Authority -->	N/A	1
Avon and Wiltshire Mental Health Partnership NHS Trust	England, UK	1
Borders Primary Care NHS Trust	Scotland, UK	1
County Durham and Darlington Priority Services NHS Trust	England, UK	1
Devon Partnership NHS Trust	England, UK	1
Fife Acute Hospitals NHS Trust	Scotland, UK	3
Fife Primary Care NHS Trust	Scotland, UK	8
Forth Valley Primary Care NHS Trust	Scotland, UK	2
Grampian Primary Care NHS Trust	Scotland, UK	4
Greater Glasgow Primary Care NHS Trust	Scotland, UK	1
Highland Primary Care NHS Trust	Scotland, UK	3
Lothian University Hospitals NHS Trust	Scotland, UK	2
NHS Lothian - Primary & Community Division	Scotland, UK	3
Oxfordshire Mental Healthcare NHS Trust	England, UK	2
Tayside Primary Care NHS Trust	Scotland, UK	8
Tees, Esk and Wear Valleys NHS Trust	England, UK	1
West Kent NHS and Social Care Trust	England, UK	1
	No. of assessments not covered by SLA:	7

2.4 PROCEDURES

2.4.1 PROCEDURES PERFORMED

Anterior Cingulotomy (ACING)

As first operation:	2
As second operation:	2
Total:	4

Vagus Nerve Stimulation (VNS)

As first operation:	0
As second operation:	0
Total:	0

Total number of procedures: 4

2.4.2 DEMOGRAPHICS

Mean Age at time of procedure: 48.9 years

2.4.3 NHS ORGANISATION FUNDING SURGERY

1. Argyll & Clyde Acute Hospitals NHS Trust (Scotland, UK)
2. Bolton, Salford & Trafford Mental Health NHS Trust (England, UK)
3. Cornwall Partnership NHS Trust (England, UK)
4. Grampian Primary Care NHS Trust (Scotland, UK)

2.4.4 PROCEDURES NOT COVERED BY SLA

1. Bolton, Salford & Trafford Mental Health NHS Trust (England, UK)
2. Cornwall Partnership NHS Trust (England, UK)

2.5 INPATIENT ADMISSIONS

Total inpatient stay - all NMD patients, Carseview (days): 112

Total inpatient stay - all NMD patients, Ward 23 (days): 8

Total inpatient stay - Inpatient ERP, Carseview (days): 64

Total inpatient stay - Other, Carseview (days): 160

3. MORTALITY DATA

Number of Deaths: 0

4. WAITING TIMES

Average Waiting Time from Referral to Assessment (Days): 121.33

Average Waiting Time from Assessment to Surgery (Days): Currently being updated.

5. QUALITY OF CARE

5.1 FORMAL COMPLAINTS

Number of Formal Complaints: 1

Description: One formal complaint was received during the reporting period. The complaint originated from the primary carer of a patient who was assessed as a new referral. The complaint alleged a failure to communicate clinical information to the referring consultant and general practitioner. This complaint was without substance and was responded to by providing a summary (including dates) of all clinical communications. The referring consultant and GP had both been provided with comprehensive, detailed clinical opinion and management recommendations - in writing - within 2 weeks of the assessment appointment. This complaint is considered to have been satisfactorily resolved.

6. CLINICAL AUDIT AND OUTCOMES

6.1 SPECIFIC ISSUES

Number of Hospital Acquired Infections: 0

Description: No HAIs recorded.

Number of Critical Incidents: 0

Description: None recorded.

6.2 CLINICAL AUDIT

OUTCOME DATA

It is too early to report on procedures performed during the reporting period. The service undertakes continuous clinical audit of the outcomes from neurosurgical interventions and anticipates that a more detailed report will be possible in 12-months time.

CLINICAL MEETINGS

Multidisciplinary Team meetings occur weekly with discussion of referrals, assessments, and other clinical activity. There is an opportunity to discuss clinical issues arising within the team.

Clinical meetings alternate with research and audit meetings, with research meetings occurring every three weeks. The research programme is regularly reviewed and clinical audit issues are discussed.

7. TEACHING AND RESEARCH ACTIVITIES

7.1 TEACHING ACTIVITIES

Multidisciplinary postgraduate education and the provision of psychiatric CPD represent core activities for the service. Within the report period, the Service presented research data to the following meeting:

European Society for Stereotactic and Functional Neurosurgery, Montreux, Switzerland (October 2006).

1. Presentation 1. S1A6. Thermal Anterior Capsulotomy for Chronic, Severe, Treatment-Refractory Major Depression. K. Matthews, D.M. Christmas, M.S. Eljamel.
2. Presentation 2. S1A10. Neurosurgical Treatments for Depression: A Comparison of Anterior Cingulotomy, Anterior Capsulotomy and Vagus Nerve Stimulation. M.S. Eljamel, K. Matthews, D.M. Christmas.
3. Presentation 3. S1A11. Neurosurgery for obsessive-compulsive disorder, other anxiety disorders and depressive disorders - Cochrane Review. David Christmas, Keith Matthews, MS Eljamel.

At this international meeting, in a scientific session dedicated to neurosurgical treatments for psychiatric disorder, the Dundee service provided 3 of the 12 oral presentations.

Additionally, several presentations were made to postgraduate medical and surgical audiences across the UK (e.g. Forth Valley Psychiatric Services, Oxford University)

7.2 PUBLICATIONS/ REPORTS/ THESES

1. Ridout N, O'Carroll RE, Dritschel B, **Christmas D, Eljamel M, Matthews K**: Emotion recognition from dynamic emotional displays following anterior cingulotomy and anterior capsulotomy for chronic depression. *Neuropsychologia* 2007; 45:1735-1743
2. **Christmas D, Curran S, Matthews K, Eljamel MS**: Neurosurgery for mental disorder, vagus nerve stimulation and deep brain stimulation. *Psychiatry* 2006; 5:212-216

3. **Christmas D, Matthews K, McVicar R, Eljamel S**, Houston G, Gilchrist J, **Livingstone A**: Functional neurosurgery for intractable mental disorder: long term effects on mental health, neuropsychological performance, social function and quality of life (CZG/2/223). Edinburgh, Chief Scientist Office, 2007

This report was rated “excellent” by the CSO.

4. **Christmas D**: Functional neurosurgery for intractable mental disorder: long term effects on mental health, neuropsychological performance, social function, and quality of life [MD Thesis]. University of Dundee, 2006.

There were a further three manuscripts submitted during the report period, the outcome of which is awaited:

Schlaepfer, T., Frick, C., Heuser, I., Bajbouj, M., Zobel, A., Maier, W., O’Keane, V., Corcoran, C., Adolfsson, R., Trimble, M., Rau, H., Hoff, H., Padberg, F., Müller-Siecheneder, F., Audenaert, K., Vandenabeele, D., **Matthews, K., Christmas, D.**, Hosten, S., Brannan, S. and Verstappen, D. Vagus Nerve Stimulation for Major Depression: Response and Remission in a European Study Population. Submitted to *Psychological Medicine*.

Christmas, D., Eljamel, M., Butler, S., Hazari, H., **MacVicar, R.**, Steele, J.D., **Livingstone, A.**, Gilchrist, J. and **Matthews, K.** Long-term Outcome of Thermal Anterior Capsulotomy for Chronic, Treatment-Refractory Depression. Submitted to *American Journal of Psychiatry*.

Steele, J.D., **Christmas, D., Eljamel, M.** and **Matthews, K.** Ablative neurosurgery for treatment-refractory depression: Anterior Cingulotomy lesion characteristics as predictors of clinical response. Submitted to *Biological Psychiatry*.

8. FINANCIAL PROFILE

Please see separate financial statement.

9. SERVICE DEVELOPMENTS AND FUTURE PLANS

9.1 SERVICE DEVELOPMENTS

Although formally designated as a national specialist service from April 1st 2006, key clinical staff appointments have only recently been made. Dr David Christmas joined the service as Consultant Psychiatrist in November 2006. Fiona Wilson and Anne Mather joined the service as Senior Charge Nurses in April 2007. As a consequence, the Service has only now started to function as envisaged in the original business plan submitted to NSD.

9.2 FUTURE PLANS

The emphasis over the next report period (April 2007-8) will be to consolidate the activities of the service and to promote awareness of our activities across Scotland and the UK. A communications strategy (including Web development) is being developed by Dr Christmas. Elements of this strategy will include liaison meetings with other UK specialist services for mood disorders and OCD, with the Mental Welfare Commission for Scotland and to build on existing relationships with the Cardiff NMD service. A special symposium on our activities is planned for the Autumn 2007 meeting of the Scottish Division of the Royal College of Psychiatrists and we will participate in a Wellcome Trust-funded UK “Master class” in the management of Mood Disorders in February 2008.

10. SUMMARY AND CONCLUSIONS

The first year of the service has focused on establishing the team and developing the clinical service. Despite only recently functioning with the full complement of staff, the service has conducted a greater-than-planned number of assessments. Neurosurgical activity has been modest but this is likely to partially reflect increasing clinical activity in delivering psychological treatments for OCD. Prospective clinical audit is continuous and ongoing.

The research programme is busy, with the report of a recent project grant from the Chief Scientist Office being rated as “excellent”. The largest-ever follow-up study of Anterior Capsulotomy for depression has been completed and the results submitted to high impact journals. Further, we have good links with neuroimaging expertise within Scotland and further projects are being planned.

In summary, there is a robust framework within which the team can build on existing skills to deliver high-quality assessment and treatment of chronic, treatment-refractory depression and OCD.