CONCISE GUIDANCE TO GOOD PRACTICE

A series of evidence-based guidelines for clinical management

NUMBER 4

Use of antidepressant medication in adults undergoing recovery and rehabilitation following acquired brain injury

NATIONAL GUIDELINES

September 2005

CLINICAL EFFECTIVENESS & EVALUATION UNIT

Royal College of Physicians
Setting higher medical standards

BSRM
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These Guidelines were produced in association with the British Society of Rehabilitation Medicine and the British Geriatrics Society

The Clinical Effectiveness and Evaluation Unit

The Clinical Effectiveness and Evaluation Unit (CEEU) of the Royal College of Physicians has expertise in the development of evidence-based guidelines and the organisation and reporting of multicentre comparative performance data. The work programme is collaborative and multiprofessional, involving the relevant specialist societies and patient groups, the National Institute for Clinical Excellence (NICE) and the Healthcare Commission.

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This series covers issues that are not covered by the major guideline producers but which are likely to be encountered across several medical specialties and in primary care. The guidelines are designed to allow clinicians to make rapid, informed decisions based on up-to-date, systematically reviewed and accessible evidence. Where such evidence does not exist, consensus will be used to complete the clinical pathway.

Series Editor: Lynne Turner-Stokes FRCP

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Guideline Development Group

Lynne Turner-Stokes (Co-Chair and Lead Author)
Consultant Physician in Rehabilitation Medicine, Northwick Park Hospital and Professor of Rehabilitation, King's College London
Representing: British Society of Rehabilitation Medicine and Royal College of Physicians

Ron MacWalter (Co-Chair)
Consultant Physician in Medicine for the Elderly and Hon Reader, Ninewells Hospital, Dundee
Representing: British Geriatrics Society

Debbie Clarke
Publicity Officer, Headway
Representing: Headway

Frances Clegg
Consultant Clinical Neuropsychologist, Northwick Park Hospital and Hon Reader, Brunel University
Representing: British Psychological Society

Ava Easton
Support Services Co-ordinator, The Encephalitis Society and Hon Fellow, Centre Research into Primary Care
Representing: The Encephalitis Society

Simon Fleminger
Consultant Neuro-psychiatrist, South London and Maudsley Trust and Hon Senior Lecturer, King's College London

John Gladman
Stroke Care Physician / Community Geriatrician and Reader in Ageing and Disability, Nottingham University Hospital
Representing: British Geriatrics Society

Helen Graham
General Practitioner, Southwark Primary Care Trust and Senior Lecturer King's College London
GP representative

Allan House
Consultant Liaison Psychiatrist, Leeds General Infirmary and Professor of Liaison Psychiatry, Leeds University

Working party administrative support was kindly provided by **Annette Guerda-Fischer** and **Joanna Gough** at the British Geriatrics Society

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Depression is increasingly recognised as a common sequel to acquired brain injury and the use of antidepressant medication in this context has increased markedly over recent years. However, these drugs are not without side effects – some of them serious – and they should not be used without proper evaluation and monitoring. This set of concise guidance was developed jointly by the British Society of Rehabilitation Medicine, the British Geriatrics Society and the Royal College of Physicians, to guide clinicians working with people who have brain injury of any cause (ie stroke, trauma, anoxia, infection etc). The guidance covers (a) screening and assessment of depression in the context of brain injury, (b) issues to consider and discuss with the patient and family/carer before starting treatment, and (c) proper treatment planning and evaluation – including planned withdrawal at the end of treatment.

Introduction

Depression is commonly associated with acquired brain injury (ABI) and can interfere with rehabilitation, leading to poorer outcomes. Management of depression is typically multi-factorial, and mood may well improve either spontaneously or as a result of rehabilitation and regained independence. The starting point for these guidelines, however, has been concern over the accurate identification of depression and the appropriate use of antidepressant medication, and so this is their major focus.

Use of antidepressants following ABI

The use of antidepressants in treatment of depression following acquired brain injury is increasingly widespread. Because the volume of cases is too large and the timescale too tight to involve a psychiatrist in all cases, first line management is usually undertaken by general clinicians. However, at the current time, many people are routinely started on antidepressant medication, often without their knowledge, and without any clear treatment plan.

- Whilst there is little doubt that antidepressant medications can be effective in improving mood for some people, they also have significant side effects, some of which can be dangerous. They are by no means appropriate or necessary in all patients.
- As with any other treatment, therefore, it is important to weigh up the likely risks and benefits, to provide patients and their families with appropriate information before initiating treatment, and to have an agreed plan for assessing whether they are in fact helping, and for deciding how long to treat.

The aim of these guidelines is to provide the general physician, GP or other clinician treating patients with ABI with an acceptable approach to managing *minor to moderate* depression in the context of brain injury rehabilitation, whether in hospital or in the community, and to identify those individuals who require more specialist advice and referral to mental health services.

Guideline development

The guidelines have been developed in accordance with the principles laid down by the AGREE collaboration (Appraisal of Guidelines for Research and development).[1] A summary of the guidelines development process is given in Appendix 1 including the methodology used for evidence gathering.[2,3]

Background

Aetiology

The aetiology of depression in the context of acquired brain injury is often multifactorial, and it is important to understand the reasons why it occurs in order to determine the circumstances in which antidepressants may or may not help (see Box 1). Antidepressants may be helpful for depression, and

Box 1. Depression in acquired brain injury (ABI).

Reasons why depression may occur following ABI

- An emotional response to the sudden onset of disability and its associated life changes.
- A direct result of the brain injury leading to altered biochemical balance within the brain and resulting change in the background level of mood.
- Preceding tendency to depression or history of depressive illness.

Reasons why symptoms that *mimic* depression may occur following ABI

- Other emotional disorders associated with brain injury, such as apathy or emotional lability, may give the appearance of depression.
- Somatic symptoms which characterise depression in the normal population may occur as a result of hospitalisation or from the brain injury itself. These symptoms may include:
  - loss of energy, appetite and libido
  - altered sleeping habits
  - poor concentration, inability to make decisions, etc.
- Abnormal physical expressions of emotional status may give the appearance of depression, eg:
  - disorders of facial expression
  - flat speech patterns
  - general physical slowness.

possibly other mood disorders such as emotional lability, but are unlikely to be helpful where clinical features of the brain injury itself mimic depression.

Epidemiology

Although it is generally accepted that depression occurs commonly in the context of acquired brain injury and is associated with poorer outcomes,[4,5] the details of epidemiology are hard to determine. Reported frequencies for depression following stroke vary widely from less than 10% to over 50%.[6,7] Reasons for this variability include the study of different populations at different times after stroke, and the application of different measures. Longitudinal studies following stroke[8–10] have demonstrated that, at least in a proportion of cases, major depression remits between one and two years after stroke, although minor depression may persist for much longer periods. Epidemiological studies to date suggest that the frequency of depression may be broadly similar in traumatic brain injury at around 25–45%,[11–14] with similar impact on psychosocial functioning.[15] However, overlap between symptoms of depression and post-concussion syndrome must be properly accounted for.[14,16] Suicide rates appear to be increased by about three-fold in people with traumatic brain injury but this may reflect pre-morbid personality as much as the brain injury itself.[13]

Management options

Although these guidelines focus on the use of antidepressant drugs, this is by no means the only way to manage depression following ABI, and it is important to consider other contributing factors and whether they could be rectified, before reaching for the prescription pad.

- Alternative interventions may include simple measures to address environmental or other factors that contribute to low mood (such as missing home and family, or worries about life outside hospital).
- Non-pharmacological interventions, such as cognitive behavioural therapy or psychotherapeutic interventions, may also be suitable for patients who have the cognitive and communicative abilities to engage successfully. However it is accepted that these programmes are rarely available within general medical settings, and tend to be a longer-term intervention. For the purpose of these guidelines therefore, they are considered as a second line intervention which may follow on from specialist referral, rather than as a practical treatment alternative currently available to most general doctors in acute treatment settings.

The approach for these guidelines

The essential components of effective management of depression in ABI are:

- accurate diagnosis
- specific treatment planning and intervention
- careful monitoring.

We start from the viewpoint of a general clinician considering the prescription of antidepressant medication, and offer a practical set of advice to

support best practice. The main practical issues for the clinician to consider are:

- Does the patient have depression which is severe enough to affect their health or to impede their recovery?
- Is the depression likely to respond to antidepressant medication or are other interventions more appropriate?
- If antidepressant medication is considered likely to be helpful, will it be safe and acceptable for that particular individual?
- How to tell whether the antidepressant medication has been effective and if it has, for how long should treatment continue?

Diagnosis and measurement of depression

As for any condition, basic history-taking should include routine general health enquiry with open questions such as 'How do you feel in yourself?' However, for reasons discussed earlier, this may not always be sufficient to identify depression in people with acquired brain injury, and it is therefore appropriate to employ a screening method as part of routine practice. A more detailed assessment is then required for those in whom depression is suspected, to identify symptoms of actual depression or lowered mood from the general effects of ABI, and to quantify the severity of mood disturbance before considering treatment (see Appendix 2).

Screening methods for depression

Some authors have proposed that the simple 'Yale question' – Do you often feel sad or depressed? – provides as good a screening assessment of depression as any.[17] The advantages of this single question is that it is simple and quick. However, a dichotomous answer of 'Yes' or 'No' may in itself be problematic because

- it requires intact comprehension and at least a reliable 'yes/no' response which may not be present in some patients following brain injury.
- the question is not so simple as it may first appear – in fact it contains two different components to which the response may be different. For example, it is not uncommon for patients to feel sad about their loss, but not depressed. There also needs to be some comparison with their normal mood state.
- as with all screening tests, a dichotomous response does not provide a sensitive measure against which to assess the benefits of treatment, particularly in cases when there may have been some partial improvement in mood.

Quantification of depression

A number of depression scales have been developed to quantify depression in a more graded manner. These exist in several different formats which may be chosen to suit the patient's ability to respond:

- **Non-verbal rating scales** – such as visual analogue scales in different forms, may be useful where verbal communication is limited but visuo-spatial skills are adequate – (although facilitation will often be required).
- **Questionnaire-based tools** – may be completed at interview or by self-report where the individual has sufficient verbal skills.
- **Scales based on observation of behaviour** – such as crying, withdrawal, apathy may be useful where the individual is unable to respond to either of the above.

Examples of these types of instrument are detailed further in Appendix 3. Some of the scales require special training and experience to administer; others are more intuitive. Some (including the Hospital Anxiety and Depression Scale (HADS) and the Beck Depression Inventory (BDI-II)) are restricted by copyright, and it is necessary to purchase a licence for their use. Short forms have been developed for some instruments, such as the Geriatric Depression Scale (GDS-15) and the Beck Depression Inventory (BDI Fastscreen), but it is important to remember that these have been developed in general populations, rather than in acquired brain injury, so their usefulness in this context is still uncertain. Preliminary work with the BDI-II suggests that a

rather different subset of the cognitive and affective items may be more appropriate in a brain-injured population.

It is perhaps useful for generalist clinical settings to have available a very simple set of screening tools for quick assessment in cases of suspected depression. Of the current *freely available* tools, a reasonable selection for use in the context of brain injury might include:

- **Depression Intensity Scale Circles (DISCs)**[19] – a simplified visual analogue scale specifically designed for people with communication or cognitive difficulties, but who have adequately preserved visuo-spatial skills.
- **The Short-Form Geriatric Depression Scale (GDS-15)**[20] – a simple questionnaire-based tool for people with adequate verbal and language skills.
- **The Signs of Depression Screening Scale (SDSS)**[21] – a simple tool based on observation of behaviour such as crying, withdrawal, apathy which may be useful where the individual is unable to respond to either of the above.

Depression scales may be useful for screening, and for determining the extent of low mood and in monitoring response to intervention. However, they should not be used as the sole indication for initiation of treatment. There is no one tool which may be applied universally, but it is appropriate for teams to familiarise themselves with a chosen selection, so that they reach a shared understanding of the meaning of a particular score. Furthermore, detailed assessment may then be undertaken through interview and/or observation. Figure 1 (page 7) presents a proposed schema for screening and assessment of depression at different levels, and the extent of clinical expertise which may be required.

The need for continued monitoring

Screening and assessment of depression carries no benefit if it is not followed through to the appropriate planning of treatment and continued monitoring to ensure response. Whatever the assessment process used, it must be timely and practical to allow for repeat on subsequent occasions for comparison.

Capacity and consent

Many people believe that depression carries a certain stigma. Patients sometimes report that they feel pressurised into taking antidepressant medication when they do not believe they are depressed, or when they would rather use other methods to combat the symptoms. It is important to ensure that they give their informed consent to treatment, if they have the capacity to do so.

The capacity to consent to treatment requires the patient to be able to:

a) understand and retain information about the treatment proposed and any alternative options that may be available, and

b) weigh up the benefits and risks associated with treatment, including any possible consequences of declining treatment.

People who have acquired brain injury sometimes have cognitive and communicative difficulties which limit their capacity to make informed decisions about their treatment and to give consent. Alternatively, they may be able to understand, but their judgement can be clouded by the depression itself – especially where hopelessness is a prominent feature. In these situations assessment may be complex; the treating physician is required under common law to provide management in the best interests of the patient who lacks capacity, but those 'best interests' must be carefully established:

- Doctors have a duty of care to make every effort to ascertain the patient's wishes with regard to each individual intervention and, where this cannot be determined, to discover what their attitude to treatment might have been, but for the brain injury.
- Family and relatives can play an important role in indicating the likely wishes of the individual in the light of their premorbid values and beliefs, but cannot give consent for them.

- A clinical neuropsychologist and/or a speech and language therapist may be helpful in assessing the individual's cognitive abilities or in enhancing communication to ascertain their level of capacity for consent and their wishes with regard to treatment.
- In complex situations where the patient lacks, or may lack, capacity and treatment is considered which appears to be against their wishes, it is appropriate to seek the advice of a psychiatrist both with regard to determining capacity and any possible application of the Mental Health Act.*

Even when patients can give consent, they may feel uncertain about why treatment is being recommended. Every effort should be made to provide information in a variety of forms and at different times, including leaflets to take away and details of who to contact for further information. A sample information sheet is given in Appendix 5.

Family members or carers are often involved on a practical level in encouraging or reminding patients to take their medication. It is generally good practice, therefore, to involve them in decisions regarding treatment, and to have their consensus wherever possible, since this may help to avoid any potential later conflicts. However, if the patient has capacity, their agreement must be sought before approaching the family.

The evidence for use of antidepressants in people with ABI

Systematic review and assimilation of the evidence for use of antidepressants in acquired brain injury is confounded by heterogeneity in research design, time-points of measurement and instruments used to assess depression. Most studies to date have examined short-term effects only, with no standardised assessment of adverse effects. There is little or no formal research-based evidence to date to inform the most appropriate regimen or length of treatment.

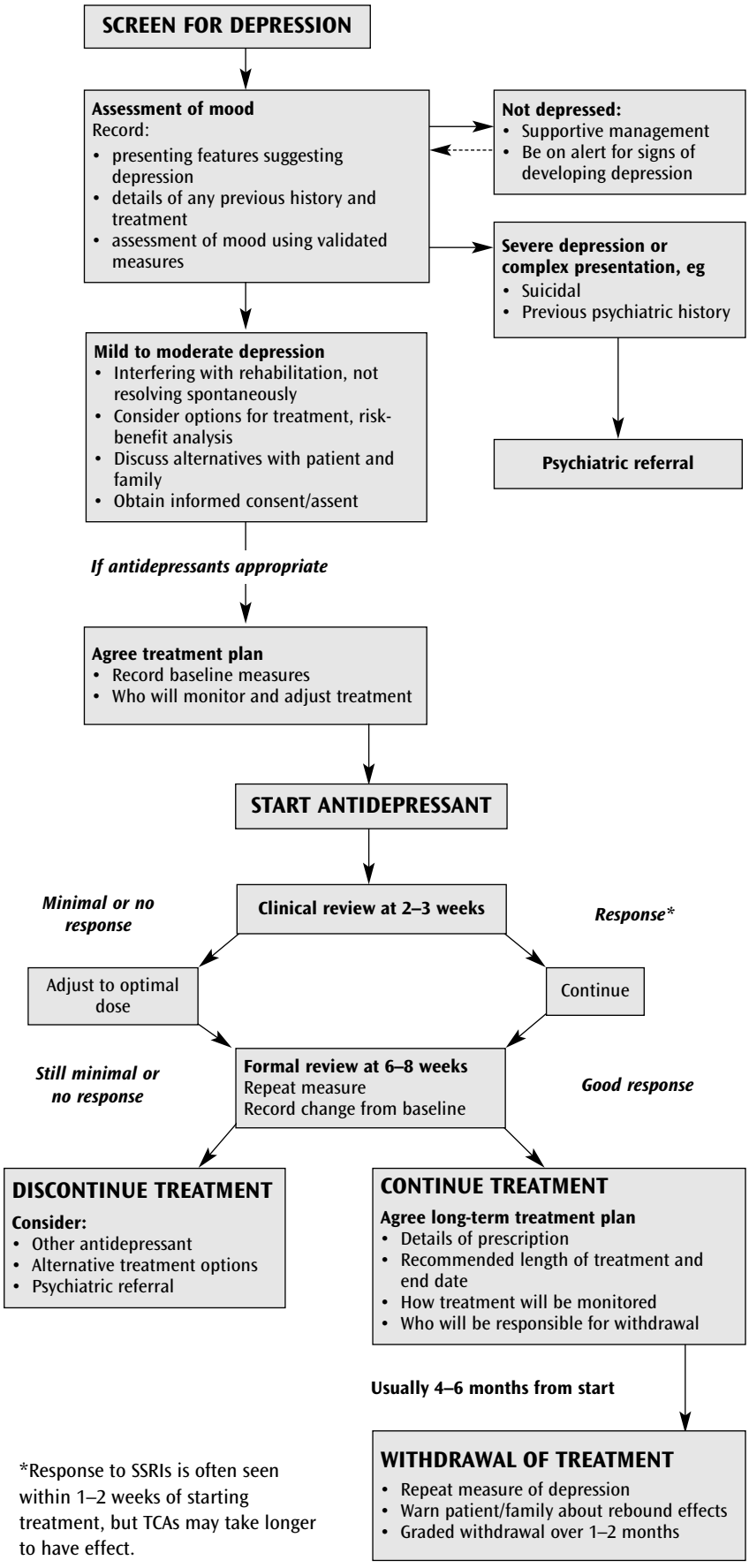
General conclusions which may be drawn, mainly from the literature on treatment of depression following stroke, are as follows:

- Antidepressants have seemed reasonably acceptable to patients and are shown to bring about significantly greater reduction in depression than either placebo or no treatment. However, the treatment effect is smaller than was initially supposed. Overall, approximately four patients would need to be treated to produce one recovery from depression which would not have occurred had they been given placebo, and one patient in every ten would drop out because of side-effects.[22]
- Although change in depressive symptoms is often reported, actual gains in terms of improved function or quality of life are harder to demonstrate.[23] However, isolated studies have reported reduced mortality[24] and improved function[25,26] in the treated group, compared with controls.
- Selective serotonin re-uptake inhibitors (SSRIs) appear generally to be about as effective as tricyclics, but have fewer reported side-effects[27] and overall appear to be cost-efficient despite the slightly higher drug costs.[28] They are also less dangerous in overdose, although overdose is rare in the context of depression following ABI.

Whilst there are no adequate randomised controlled studies in other forms of brain injury, a number of small open-label studies in traumatic and mixed brain injury populations[29–31] suggest that SSRIs are both effective and well-tolerated in management of depression, as well as emotional lability.[32,33] Tricyclic antidepressants (TCAs) have possibly performed less well in this group to date, with concerns raised both with regard to treatment resistance[34] and seizure rates.[35] However, the survey undertaken as part of guideline development (see Appendix 1A)[2] demonstrates that many consultants currently use TCAs as a second- or even first-choice agent in the presence of symptoms such as neuropathic pain, hypersalivation or insomnia, where their 'side-effects' may actually be desirable.

* In Scotland the provisions of the 'Adults with Incapacity Act, 2000' should be followed.

Fig 1. Depression management flowchart An overview of the process for management of depression in the context of rehabilitation following brain injury. Appendix 4 provides a checklist which may photocopied and used as part of the patient records to prompt management according to these guidelines.



Specific risks

As the use of antidepressants has become increasingly widespread so the risks of treatment have become apparent. Specific risks include:

- All antidepressant agents lower the seizure threshold to a certain extent, and late onset seizures are a recognised problem following ABI,[36–38] although the extent to which antidepressant treatment exacerbates the risk of seizures has yet to be quantified[35,39]
- Other important risks include[23,40]:
  - Interaction with warfarin, anticonvulsants and other medications which require careful adjustment of dose to maintain therapeutic levels
  - Hyponatraemia[41]
  - Impotence and sexual dysfunction[42]
  - Cardiac arrythmias (particularly with the tricyclic antidepressants)
  - Gastro-intestinal effects, with increased incidence of GI haemorrhage.

Concise guidelines on the use of antidepressant medication following acquired brain injury

Recommendation *Grade of recommendation*

1 Screening (See Appendix 2) C

The possibility of depression should be considered for any patient with acquired brain injury:

- At the very least the patient should be asked 'Do you often feel sad or depressed?' at each assessment.
- For individuals who are unable to respond, staff should consider whether their behaviour suggests depression (eg apathy, withdrawal, non-compliance, excessive crying etc).
- Assessment should include inquiry for prior psychiatric history or any previous use of antidepressant medication, and should take into account previous personality and emotional traits, and change from normal personality.
- The cause of apparent distress should be explored with the patient by an appropriate professional.

2 More detailed assessment of mood (See Appendices 2 and 3) C

For patients in whom depression is suspected, more detailed assessment of mood should be undertaken:

- using validated instruments, interview and/or observation
- to determine the severity of depression and contributing factors.

3 Before considering treatment for depression C

The clinician should consider the following questions: (See Appendix 4)

- Is depression interfering with the patient's quality of life or progress in rehabilitation?
- Is antidepressant treatment really needed at this time or are other interventions more appropriate in the first instance? For example, are there simple interventions which would improve quality of life and hence boost the patient's mood?
- Has a period of watchful waiting (ie at least 2–3 weeks) demonstrated that the problem is not resolving spontaneously?
- Has the patient and their family (where appropriate) been properly informed about the nature of depression and different treatment options?

4 Before starting an antidepressant C

The clinician should consider the following questions: (See Appendix 4)

- Are there any contraindications to treatment?
- Do the likely benefits outweigh the risks?
- Has the patient given informed consent – or, if unable to consent, have appropriate procedures been followed? (See Appendices 4 and 5)
- How will you know if the antidepressant has worked?

5 Formulating the treatment plan (See Fig 1) C

Antidepressants should be prescribed according to an agreed treatment plan which includes:

a Baseline assessment using an appropriate validated measure of depression

b Baseline urinalysis, and blood samples for FBC, U&E and LFTs*

c Selection of an appropriate agent†

d Clinical review of initial response to optimise dose at 2–3 weeks

e Repeat assessment of mood after 6–8 weeks (using the same measure as in (a) to assess the effect

f In the case of a positive treatment response, an agreed treatment plan outlining:
- length of treatment (usually 6 months)
- procedure for withdrawal at the end of treatment and who will supervise this.

g If the response to an appropriate dose of medication is poor or absent at 6–8 weeks, the drug should be withdrawn and alternative treatment or referral considered.

*Key: FBC = full blood count; U&E = urea and electrolytes; LFT = liver function tests.
†Clinicians should refer to the manufacturer's Summary of main Product Characteristics (SmPC) for any agent they are planning to use.

6 During treatment C

- Patients should see their doctor regularly during treatment (at least every 2 months) and any clinical deterioration during treatment should be investigated. In particular, the following should be considered as possible side-effects of treatment:
  - hyponatraemia, seizures, GI bleeding, anticholinergic symptoms, sexual dysfunction, sedation, hallucinations, increased confusion, headache.
- Antidepressant medication should not be given under automatic repeat prescription, and no more than 2 months supply should be given in any prescription.

7 Referral for formal psychiatric review C

The patient should be referred for formal psychiatric review if:

- Depression is very severe or resistant to treatment
- There is a past history of psychiatric disorder
- The patient shows evidence of suicidal ideation or intent – this should trigger emergency referral
- It seems likely that the patient needs to be treated under a section of the Mental Heath Act 1983 or equivalent.

8 Withdrawal from treatment C

At the end of the treatment period (4 to 6 months) there should be a planned withdrawal of antidepressant medication, which should be undertaken gradually over a period of 1 to 2 months (or longer if specified in the SmPC).

Prior to withdrawal:

- The patient's mood should be re-evaluated using the same measure as at baseline
- The patient/family should be warned about possible rebound symptoms.

In the event of significant longer-lasting relapse of depression, the need for long-term treatment should be considered and formal psychiatric advice sought.

Differences between antidepressants

It should be noted that none of the existing antidepressant agents has a UK licence which specifically approves use in ABI.

In the absence of formal research to inform the choice of antidepressant agent, the following is adapted from the Royal College of Physicians guide: *The psychological care of medical patients*.[43]

If antidepressant therapy is considered appropriate and if the individual agrees to treatment, the profile of the drug should be matched to the patient's individual needs as far as possible[44] depending on the effect and tolerability of treatment, whether sedation is required and the risks of interactions:[45]

- Selective serotonin re-uptake inhibitors (SSRIs) have generally replaced tricyclics as the drugs of first choice in depression because of their lesser side-effect profile, which may be particularly important in people with ABI who tolerate poorly side-effects such as sedation.
- Six SSRIs are currently available – fluoxetine, fluvoxamine, paroxetine, sertraline and citalopram and escitalopram. There are important pharmaco-kinetic differences between them[45] notably in their ability to inhibit hepatic cytochrome P450 iso-enzymes which are responsible for the metabolism of many drugs. *In vitro* studies suggest that citalopram and sertraline are least likely to inhibit these iso-enzymes and therefore least likely to cause interactions with other drugs. A recent survey of rehabilitation consultants and geriatricians in the UK[2] has demonstrated these two agents to be the most common first choice for management of depression following ABI at the current time.
- Escitalopram is a newer agent, which appears also to be highly selective with minimal inhibition of cytochrome P450 iso-enzymes. Trials suggest that it is at least as effective as citalopram in the management of severe depression[46,47] but it has yet to be evaluated in the context of stroke or other forms of ABI.
- Other more recently introduced antidepressants include nefazodone, venlafaxine, mirtazapine and reboxetine. These have significantly different pharmacological properties and are claimed to have greater specificity, equivalent or better efficacy and fewer side-effects than the earlier classes of antidepressants.[48] However, they have not yet been fully tested in the context of ABI, and they are also significantly more expensive. At present they should be used as second line drugs, when SSRIs have not been effective, or have produced unwanted side-effects or drug interactions.
- Very recently, preliminary data in non-brain injured patients suggests that St John's Wort may be as effective and better tolerated than paroxetine, but there is as yet no data in ABI, or in comparison with the more specific agents which are preferred in this context.[49]

In the absence of specific evidence or regulatory approval on which to base firm advice, a pragmatic approach would be as follows:

- The clinician should become familiar with one or two agents in each class and should refer to the SmPC (previously known as the Manufactuter's Datasheet) for each agent used.
- A specific SSRI, such as citalopram or sertraline, represents a reasonable first choice agent[13,23,50] unless the anticholinergic effects of a tricyclic agent are positively desirable (for example sedation or suppression of hypersalivation).
- The patient should be kept under direct clinical monitoring whilst the drug is built up to an effective dose to ensure that it is tolerated and producing the required improvement in mood, and on maintenance they should be kept under regular review.
- If not tolerated or effective, it is appropriate to withdraw the medication and change to a drug from a different class after an appropriate washout period, depending on the agent used (with appropriate advice from the pharmacy).
- In the absence of response to or tolerance of a second agent, antidepressant drugs are unlikely to provide the solution and should usually be discontinued.

- Depression in the context of ABI is usually transitory, and so in the majority of cases treatment can successfully be withdrawn after 4–6 months. At the end of this time, there should be a planned graded withdrawal of the medication over at least 1–2 months (or longer if recommended in the SmPC), and the patient should be warned to expect rebound symptoms.
- A minority of patients may experience relapse over time, and require longer-term treatment. In this case it is appropriate to seek formal psychiatric advice.

The details of approach will depend to a certain extent on the individual and the context of treatment.

Age – There is no reason *per se* to consider that older adults are different to younger adults, when defining treatment recommendations. However, there may be some age-associated characteristics which affect the approach to intervention – notably co-morbidity and poly-pharmacy – which may render them susceptible to side-effects and affect the choice of antidepressant used.

Alternative interventions – Some patients, especially in the community, may already be taking herbal or homeopathic remedies (such as St John's Wort) which may occasionally interact with prescribed medication, so it is important to enquire about the use of alternative approaches when planning treatment.

Rehabilitation setting – The context of rehabilitation and the time scale over which intervention is offered may affect the approach to management, particularly with regard to arrangements for review and follow-up. Inpatient programmes are usually offered on a fairly short time scale, with pressure for prompt intervention in order to maximise participation in the rehabilitation programme. In community rehabilitation settings, patients are often followed for longer, which may give more opportunity for watchful waiting and to observe the effects of treatment. Either way, careful consideration must always be given to follow-up when the patient moves from one setting to another, to ensure that treatment is properly monitored and is withdrawn at the appropriate time.

Implications for implementation

Implementation of these guidelines will involve investment to provide:

- Improved training in assessment and management of depression for all clinicians working with ABI patients.
- Better information and awareness among the general public with regard to depression and its management in this context.
- Better monitoring, follow-up and communication between clinicians across the different settings.

However, successful implementation of the guidelines will be expected to reduce unnecessary, unwanted, and potentially dangerous use of medication in a vulnerable patient group – with overall cost-effective results.

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Appendix 1

1A Guideline development process

Scope and purpose

Overall objective of the guidelines	To clarify when it may be appropriate to use antidepressants and to provide guidance on an acceptable approach to managing mild to moderate degrees of depression in the context of recovery and rehabilitation following acquired brain injury (ABI).
The patient group covered	Adults with ABI of any cause, including stroke and other vascular injury, trauma, inflammation/infection, anoxia etc, who present with depression or low mood in the context of recovery or rehabilitation in inpatient or community settings.
Target audience	General physicians, GPs and other clinicians involved in the management and rehabilitation of patients with ABI.
Clinical areas covered	■ Screening and assessment of depression in the context of ABI ■ Selection of patients for whom antidepressants are appropriate ■ Providing information and obtaining informed consent ■ Treatment planning and monitoring, including withdrawal ■ Which patients to refer for formal psychiatric advice.

Stakeholder involvement

The Guideline Development Group (GDG)	A multidisciplinary working party representing: ■ physicians practising in stroke medicine, and rehabilitation for adults across the age ranges ■ liaison psychiatry, neuropsychiatry, clinical neuropsychology ■ primary care ■ representatives of patients and user groups.
Funding	The project was jointly funded by the British Society of Rehabilitation Medicine (BSRM) and the British Geriatrics Society (BGS).
Conflicts of interest	Conflicts of interest are fully declared and are summarised below (Appendix 1B).

Rigour of development

Evidence gathering	Evidence for these guidelines was provided by review of Cochrane Library, Medline, Embase, conference proceedings and other guidelines up to October 2004. Articles not published in English were excluded. As part of the guideline development, a survey of consultant members of the BSRM and BGS was undertaken to establish current practice in the UK regarding the use of antidepressant medication in the context of rehabilitation following ABI.[2]
Review process	The evidence was evaluated by members of the GDG.
Links between evidence and recommendations	The system used to grade the evidence and guidance recommendations is that published by the Royal College of Physicians.[3] In the absence of specific research evidence on which to base the detailed advice, all recommendations in this set of guidelines are graded at level C.
Piloting and peer review	Not yet piloted.

Implementation

Tools for application	Tools for implementation are included in the Appendices.
Plans for update	The guidelines will be reviewed in 2008.

1B Conflicts of interest declared by the Guideline Development Group

Ron MacWalter

1. Member of Steering Committee SPARC Study, Pfizer
2. Payment of conference fees: BoehringerIngelheim, MSD
3. Lecture fees: Servier, Organon, BoehringerIngelheim, Sanofi, BMS
4. Consultancy: Takeda, AstraZeneca

Non Profit:

1. Sponsorship of Department: MSD, BoehringerIngelheim

Studies commercially funded:
Pfizer, AstraZeneca, Bayer, Sanofi, BoehringerIngelheim

Lynne Turner-Stokes

1. Active research in the field of depression following ABI
2. Co-originator of the DISCs
3. In the past has held unrestricted investigator-led research grants from Pfizer

Frances Clegg

1. Active research in the field of depression following ABI
2. Co-originator of the DISCs

Ava Easton

1. Member of the Encephalitis Society

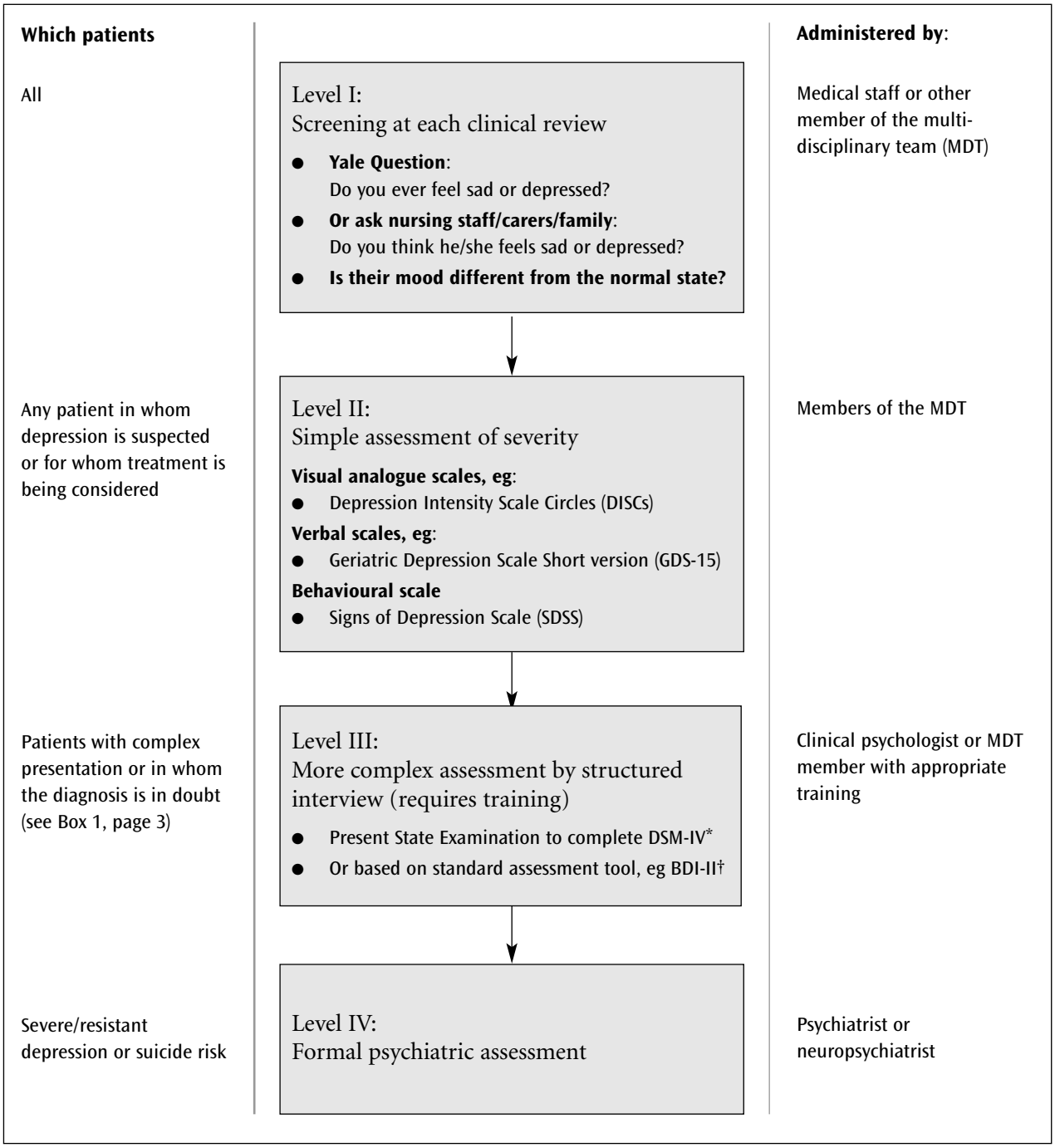
John Gladman

1. NHS Directorate receives minor sponsorship from pharmaceutical companies who market psycho-active drugs
2. Sits on the Academic and Research Committee for the British Geriatrics Society

Allan House

1. Active research in the field of depression following stroke

Appendix 2. Screening and assessment of depression in ABI



*DSM-IV = *Diagnostic and Statistical Manual of Mental Disorders*, American Psychiatric Association, 1994.

†BDI = Beck Depression Inventory II. (Use of the Beck Depression Inventory is restricted by copyright. It is necessary to purchase a licence to use these scales. Contact details for providers are given in Appendix 3c.)

Appendix 3. Assessment tools and where to find them

3A Methods for assessment of mood in people with cognitive and/or communicative impairment

Cognitive/communication level	Assessment method	Some suitable instruments
Minimally responsive No meaningful communication/ interaction *Or* Acute confusional state	*(Formal assessment of mood involving patient's participation is impossible)* Observation by staff	Assessment of distress (nature, severity, frequency) using clinical judgement, including quantification
Extremely severe impairment Unreliable yes/no response Some interaction possible – but may be limited	Observation of mood-related behaviour by staff using systematic questionnaires	**Behavioural observation scales, eg** • Signs of Depression Scale (SDSS) or • Stroke Aphasic Depression Questionnaire (SADQ)
Very limited communication Severe expressive dysphasia, unable to read – but basic comprehension and reliable yes/no response through gesture or pointing	Simple questions or scales which do not rely on ability to speak or read, and Observation as above	**Simple scales, eg** Yale question Visual analogue scale, eg • Depression Intensity Scale Circles (DISCs) or • Numbered Graphic Rating Scale (NGRS)
Moderately limited communication Some social interaction through spoken word Reasonable aural comprehension and/or limited ability to read	More complex questionnaires or scales requiring some facilitation or verbal administration through structured interview and using large-print version if required	**Questionnaires, eg** • Geriatric Depression Scale Short Form (GDS-15) • Hospital Anxiety and Depression Scale (HADS)* • Beck Depression Inventory (BDI-II)*
No significant limitation in communication Able to read simple sentences Good aural comprehension	Any instrument may be used, determined by client group; trained staff time available for assessment	Any of the above
Amnesia With no significant impairment in communication or cognition	As above, but focussing on present mood state and repeated administration, supplemented by staff observation and recording	Any of the above
Complex or severe depression Previous psychiatric condition or high risk of self-harm, and reasonable cognitive skills	Formal psychiatric assessment Supported if necessary by a speech and language therapist or carer if patient has significant communication problems	**Detailed interview:** • Present State Examination to apply the DSM-IV criteria[1]

*Protected by copyright. See Appendix 3c for details.

3B Details of assessment instruments and their validation

Instrument	Brief Description	Comments and references
Questionnaire-based tools		
Beck Depression Inventory (BDI-II)	Self report scale – 21 items May be used to form basis for an interview	Widely used and validated, including in stroke research.[2,3]
BDI Fastscreen	Short-form of BDI-II – 7 items Designed to pick up cognitive features of depression only	Short form not yet validated for patients with stroke or other ABI. *Copyright protected*
Hospital Anxiety and Depression Scale (HADS)	Self-report scale – 14 items 7 items on anxiety, and 7 items on depression. Designed to overcome the effects of hospitalisation.	Very widely used and validated for many conditions;[4,5] some validation in the context of stroke [6,7] but not in other forms of ABI. *Copyright protected*
Geriatric Depression Scale (GDS)	30 items with yes/no answers Designed for older adults – excludes somatic items	Quite widely used, and some validation in stroke [8,9]
GDS Short Form (GDS-15)	Short form: 15 items as above	Short form not yet well validated with stroke patients *Freely available*
Non-verbal rating scales		
Visual analogue/Numerical rating scales (See 2.1 p22)	Assess mood on a visual or numeric rating scale – usually scored 0–10 Theoretically useful for dysphasic patients	Good evidence for reliability in those patients who can complete them. Patients with visuo-spatial neglect may have difficulty with horizontal scales [10–13] Pre-screening is recommended[10]
Depression Intensity Scale with Circles (DISCS) (See 2.2 p23)	6-point scale using vertical array of circles Designed as a simplified rating scale for use in ABI	Validated in stroke and ABI[14] *Freely available from authors*
Visual Analogue Mood Scales (VAMS)	Series of 8 vertical VAS scales for different aspects of mood. Scored in mm on a 100 mm scale	Normative validation and in stroke population[15–17]
Visual Analogue Self-Esteem Scale (VASES)	10 illustrations of bipolar constructs Scored 1–5	Often used by speech and language therapists, but little formal validation[17,18]
Scales based on observation of behaviour		
Signs of Depression Scale (SDSS)	6 items, Yes/No answers	Suitable as a crude screening tool[17,19,20] Validity/reliability not yet established *Freely available from authors*

continued

Instrument	Brief Description	Comments and references
Stroke Aphasic Depression Scale (SADQ) Hospital Stroke Aphasic Depression Scale (SADQ-H)	21 items of mood-related behaviour Hospital and Community version	Validated in stroke and multiple sclerosis[17,21–24] *Freely available from authors*
Short version: Stroke Aphasic Depression Scale – 10 (SADQ-10)	Short form: 10 items – from the SADQ	Validity/reliability as yet uncertain[23]
Hamilton Depression Rating Scale (HRDS)	21 items of mood-related symptoms/ behaviour Assessed by psychiatrically trained observer	Has been widely used in stroke research, but not formally validated in the ABI population[25] Requires training to administer so probably not suitable for more general settings

References for assessment tools and validation

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3C Source of assessment tools

1. Questionnaire-based tools

These may be completed at interview or by self-report where the individual has sufficient verbal skills. The following information should help physicians to access tools and use them appropriately.

1.1 The Geriatric Depression Scale (GDS) and Short Form GDS-15

Original references	1. Yesavage JA, Brink TL, Rose TL *et al*. Development and validation of a geriatric depression rating scale: a preliminary report. *Journal of Psychiatric Research* 1983;**17**:27.
	2. Sheikh JI, Yesavage JA. Geriatric Depression Scale: recent evidence and development of a shorter version. *Clinical Gerontology* 1986;**5**:165–172
Copyright	The Geriatric Depression Scale may be used freely for patient assessment according to the authors.

The full version of the GDS is presented opposite. The GDS-15 has been shown to reflect GDS-30 scores with a high degree of accuracy in general elderly populations. However, to our knowledge it has not been specifically evaluated in the context of stroke or brain injury. Looking at the items themselves it is clear that some may well be confounded by the effects of recent brain injury, and it is possible that a rather different sub-set might be more applicable in this particular context.

1.2 The Hospital Anxiety and Depression Scale

Original reference	Zigmond AS, Snaith RP. The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica* 1983;**67**:361–70
Copyright	Protected. Permission to use the scale may be obtained from The National Foundation for Educational Research (http://www.nfer-nelson.co.uk). The firm supplies the scale, the chart for recording of scores and the manual with instructions for its use.
Contact details	nferNelson The Chiswick Centre, 414 Chiswick High Rd, London W4 5TF Tel: 020 8996 8444 Email: information@nfer-nelson.co.uk

1.3 The Beck Depression Inventory (BDI-II) and BDI Fastscreen

Original references	1. Beck AT, Ward CH, Mendelssohn MJ, Erbaugh J. An inventory for measuring depression. *Archives of General Psychiatry* 1961;**4**:561–71 2. Beck AT, Guth D, Steer RA, Ball R. Screening for major depression disorders in medical inpatients with the Beck Depression Inventory for Primary Care. *Behaviour Research & Therapy* 1997;**35**:785–91.
Copyright	Protected. Permission to use the scale may be obtained from Harcourt Assessment (http://www.harcourt-uk.com/) The firm supplies the scale and the manual with instructions for its use.
Contact details	Harcourt Assessment Halley Court, Jordan Hill, Oxford, OX2 8EJ Tel: 01865 888188 Fax: 01865 314348 Email: info@harcourt-uk.com

The Geriatric Depression Scale (GDS)

Choose the best answer for how you felt this past week **CIRCLE ONE**

1. Are you basically satisfied with your life?*	Yes	**No**
2. Have you dropped many of your activities and interests?*	**Yes**	No
3. Do you feel that your life is empty?*	**Yes**	No
4. Do you often get bored?*	**Yes**	No
5. Are you hopeful about the future?	Yes	**No**
6. Are you bothered by thoughts you can't get out of your head?	**Yes**	No
7. Are you in good spirits most of the time?*	Yes	**No**
8. Are you afraid that something bad is going to happen to you?*	**Yes**	No
9. Do you feel happy most of the time?*	Yes	**No**
10. Do you often feel helpless?*	**Yes**	No
11. Do you often get restless and fidgety?	**Yes**	No
12. Do you prefer to stay at home, rather than going out and doing new things?*	**Yes**	No
13. Do you frequently worry about the future?	**Yes**	No
14. Do you feel you have more problems with memory than most?*	**Yes**	No
15. Do you think it is wonderful to be alive now?*	Yes	**No**
16. Do you often feel downhearted and blue?	**Yes**	No
17. Do you feel pretty worthless the way you are now?*	**Yes**	No
18. Do you worry a lot about the past?	**Yes**	No
19. Do you find life very exciting?	Yes	**No**
20. Is it hard for you to get started on new projects?	**Yes**	No
21. Do you feel full of energy?*	Yes	**No**
22. Do you feel that your situation is hopeless?*	**Yes**	No
23. Do you think that most people are better off than you are?*	**Yes**	No
24. Do you frequently get upset over little things?	**Yes**	No
25. Do you frequently feel like crying?	**Yes**	No
26. Do you have trouble concentrating?	**Yes**	No
27. Do you enjoy getting up in the morning?	Yes	**No**
28. Do you prefer to avoid social gatherings?	**Yes**	No
29. Is it easy for you to make decisions?	Yes	**No**
30. Is your mind as clear as it used to be?	Yes	**No**
TOTAL SCORE (No. of depressed answers)		

Answers in bold type indicate depressed answers.
Questions in bold type constitute the 15-item short-form GDS

Normative scores:

Full version:	Normal	5 +/- 4	Mildly depressed	15 +/- 6	Very depressed	23 +/- 5
Short version:	Normal	0-5	Mildly depressed	6-9	Very depressed	10-15

2. Non-verbal rating tools

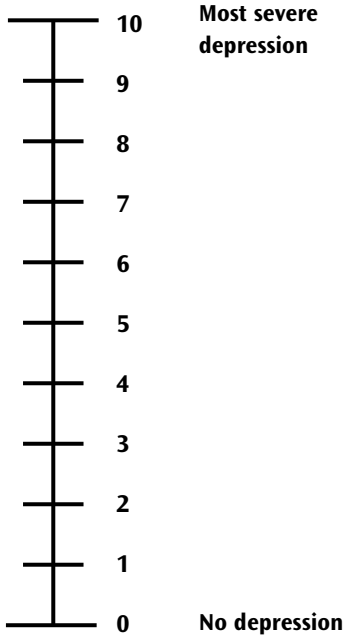
Tools such as visual analogue scales in different forms, may be useful where verbal communication is limited although facilitation will often be required.

2.1 Numeric Graphic Rating Scale (NGRS)

People with acquired brain injury, especially involving the right hemisphere, may have difficulty with visuo-spatial perception. For this reason, vertical visual analogue scales have been favoured over horizontal scales. For those with retained numeracy skills the addition of numbered increments may help to orientate patients to the whole scale.

The Numbered Graphic Rating Scale provides a simple vertical visual analogue scale with numbered cues. However, many brain injured patients may still have difficulty in using these scales and pre-screening for ability to perceive the whole scale is recommended prior to use (Turner-Stokes L, Rusconi S. Screening for ability to complete a questionnaire: a preliminary evaluation of the AbilityQ and ShoulderQ for assessing shoulder pain in stroke patients. *Clinical Rehabilitation* 2003;**17**(2):150–7).

An example of the NGRS together with instructions for administration is given below.



The NGRS is displayed on a laminated card. It measures 10cm, with numbered increments every 1cm

Instructions for administration

Say to the patient:

1. This is a scale to measure depression.
2. Please point to — Indicates
   - The Highest score [*should indicate 10*] ....
   - The Mid-point score [*should indicate 5*] ....
   - The Lowest score [*should indicate 0*] ....

   [*Continue only if satisfactorily accomplished*]
3. The numbers show how depressed you feel.

   [*Indicate 0*]
   - The bottom of the scale shows no depression.

   [*Indicate 10*]
   - The top shows depression as bad as it can be.

   [*Pointing at each number in ascending order*]
   - As you go from the bottom of the scale to the top, you can see that depression is becoming more and more severe.
4. Which point on the scale shows how depressed you feel today?

To the administrator:

In your opinion was the person able to understand this scale?

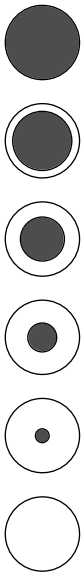
Yes ☐ No ☐

Comment:

2.2 The Depression Intensity Scale Circles (DISCs)

This visual analogue scale has been developed as a simple intuitive scale, especially for people with cognitive and communicative problems following brain injury. The DISCs, together with instructions for administration are given below.

Original reference	Turner-Stokes L, Kalmus M, Hirani D, Clegg F. The Depression Intensity Scale Circles: Initial evaluation of a simple assessment tool for depression in the context of brain injury. *Journal of Neurology, Neurosurgery and Psychiatry*. In press 2005.
Copyright	Freely available from authors
Contact details	Professor Lynne Turner-Stokes, RRU, Northwick Park Hospital, Watford Road, Harrow, Middlesex HA1 3UJ Tel: 020 8869 2800 Fax: 020 8869 2803 Email: lynne.turner-stokes@dial.pipex.com



Most severe depression

No depression

The DISCs is displayed on a laminated card; each circle is 2 cm in diameter; the scale measures 15 cm from the centre of the bottom circle to the centre of the top circle; a pictorial version is also available.

Instructions for administration

Say to the patient:

1. This is a scale to measure depression.
2. Please point to each of the circles in turn to make sure that you can see them all
   [*Continue only if satisfactorily accomplished*]
3. The grey circles show how depressed you feel.

   [*Indicate the clear circle at the bottom*]
   - The bottom circle shows no depression.

   [*Indicate the fully shaded circle at the top*]
   - The top circle shows depression as bad as it can be.

   [*Pointing at each circle in ascending order*]
   - As you go from the bottom circle to the top, you can see that depression is becoming more and more severe.
4. Which of these circles shows how depressed you feel today?

To the administrator:

In your opinion was the person able to understand this scale?

Yes ☐ No ☐

Comment:

3. Scales based on observation of behaviour

For patients unable to communicate their feelings even at a basic level, scales which record observation by staff of mood related behaviour such as crying, withdrawal, apathy may offer the only remaining alternative.

3.1 The Signs of Depression Scale (SDSS)

Original reference	Hammond MF, O'Keeffe ST, Barer DH. Development and validation of a brief observer-rated screening scale for depression in elderly medical patients. *Age and Ageing* 2000;**29**(6):511–5
Copyright	British Geriatrics Society. The scale is freely available with permission from the authors
Contact details	Margaret F Hammond, Department of Primary Care, University of Liverpool Whelan Building, The Quadrangle, Brownlow Hill, Liverpool L69 3GB Fax: +44 (0) 151 794 5604 Email: mhammond@liverpool.ac.uk

Signs of Depression Scale (SDSS)

1. Does the patient sometimes look sad, miserable or depressed?	Yes / No
2. Does the patient ever cry or seem weepy?	Yes / No
3. Does the patient seem agitated, restless or anxious?	Yes / No
4. Is the patient lethargic or reluctant to mobilise?	Yes / No
5. Does the patient need a lot of encouragement to do things for him/herself?	Yes / No
6. Does the patient seem withdrawn, showing little interest in the surroundings?	Yes / No
(Score 1 for 'Yes' and 0 for 'No') **Total Score**	

3.2 The Stroke Aphasic Depression Questionnaire (SADQ) and SADQ-10

Original references	1. SADQ-H (Hospital version): Lincoln NB, Sutcliffe LM, Unsworth G. Validation of the Stroke Aphasic depression Questionnaire (SADQ) for use with patients in hospital. *Neuropsychological Assessment* 2000;**1**:88–96 2. SADQ-10 (Shorter version): Sutcliffe LM, Lincoln NB. The assessment of depression in aphasic stroke patients: the development of the Stroke Aphasic Depression Questionnaire. *Clinical Rehabilitation* 1998;**12**(6):506–13.
Copyright	The scale is freely available with permission from the authors
Contact details	Professor Nadina Lincoln, School of Psychology, University of Nottingham, University Park, Nottingham NG7 2RD Tel: +44 115 951 5315 Fax: +44 115 951 5324 Email: nadina.lincoln@nottingham.ac.uk

The Stroke Aphasic Depression Questionnaire – Hospital version

Please indicate on how many out of the last 7 the patients has shown the following behaviours:

Behaviour	Days this week			
	Every day	4–6	1–4	Not at all
1. Did his/her waking cause a disturbance in sleep patterns?	3	2	1	0
2. Did he/she have weeping spells?*	3	2	1	0
3. Did he/she have restless disturbed nights?*	3	2	1	0
4. Did he/she initiate activities?	0	1	2	3
5. Did he/she avoid eye contact when you spoke to him/her?*	3	2	1	0
6. Did he/she burst into tears?*	3	2	1	0
7. Did he/she smile when you spoke to him/her?	0	1	2	3
8. Did he/she complain of aches and pains?*	3	2	1	0
9. Did he/she refuse to eat meals?	3	2	1	0
10. Did he/she get angry?*	3	2	1	0
11. Did he/she refuse to participate in social activities?*	3	2	1	0
12. Did he/she laugh at a joke?	0	1	2	3
13. Is he/she restless and fidgety?*	3	2	1	0
14. Did he/she sit without doing anything?*	3	2	1	0
15. Did he/she concentrate on activities?	0	1	2	3
16. Did he/she take care of his/her appearance to the best of their ability?	0	1	2	3
17. Did he/she seem to enjoy social activities or outings?	0	1	2	3
18. Did he/she keep him/herself occupied during the day?*	0	1	2	3
19. Did he/she take sleeping tablets	3	2	1	0
20. Did he/she take interest in events around him/her?	0	1	2	3
21. Did he/she look at you when you approached him/her?	0	1	2	3

***Questions marked with an asterisk are the 10 items included in the short SADQ-10**

Appendix 4. Check list for management of depression following ABI

This checklist may be photocopied

Patient Name: _____ **Assessing Doctor:** _____

Hospital number: _____ **Date:** ____/____/_____

Results of screening and assessment for depression:

❑	**Depression none or minimal**	Supportive treatment with observation
❑	**Severe or complex depression**	Refer for psychiatric opinion
❑	**Mild or moderate depression**	Continue below

Before starting antidepressant therapy, consider carefully:

Is treatment really needed? ❑ **Yes** ❑ **No**

- Is the patient actually depressed, or could symptoms be due other factors, eg to the brain injury itself, hospitalisation or reaction to loss?
- Is there a pre-morbid history of depression/other psychiatric condition?
- Has period of watchful waiting passed to see if mood will lift spontaneously?
- Is the depression interfering with their quality of life, or impacting on rehabilitation?

What are the risks of treatment? ❑ **High** ❑ **Medium** ❑ **Low**

- Is the patient on warfarin, anticonvulsants or other drugs which could interact with antidepressants
- Do they have a normal serum sodium?
- Is there a history of:
  - seizures,
  - heart disease or cardiac arrhythmia
  - hepatic or renal impairment,
  - GI haemorrhage,
  - autonomic dysfunction?

Do the likely benefits outweigh the risks? ❑ **Yes** ❑ **No**

Has the patient given informed consent to this treatment? ❑ **Yes** ❑ **No**

- Does the patient have capacity to consent?
- Have they been properly informed about the benefits and risks of treatment and other alternatives (*see information sheet, Appendix 5*)
- Are they willing to accept treatment with antidepressant medication?
- If they do not have mental capacity to consent, have you taken proper steps to establish their wishes?
- Are the family/carers in agreement and willing to support treatment?

How will you know if the treatment has worked?

- Have you assessed the patient's mood with a suitable measurement tool?
- If their response is variable, have you applied this on several occasions?
- How will follow-up and repeat measurement be undertaken?

Record of assessment and follow-up on antidepressant treatment	
Record features of depression • For which treatment is being started	**Symptoms/signs of depression:**
Baseline assessment • Record baseline assessment for later comparison	**Assessment tool(s)** **Baseline score(s):** Attach copy of assessment tool
Treatment plan • Record details of treatment • Who will review and when • Ensure that the named reviewer is aware of this	**Date treatment started** ____/____/____ **Antidepressant agent:** **Starting dose:** **Planned review date:** **By whom:**
Initial Clinical Review (2–3 weeks): • Has there been any clinical response • Have there been any side effects? • Does the treatment dose need adjusting? **Record any possible side-effects:**	**Clinical Review Date** ____/____/____ **Mood level:** ❑ **Same** ❑ **Better** ❑ **Worse** **Continued antidepressant regimen:** **Agent:** **Dose:** **Planned review date:** **By whom:**
Formal Review (6–8 weeks) **With repeat of measure(s) used at baseline** • Has the treatment worked • Is it tolerated?	**Formal Review Date** ____/____/____ **Repeat Assessment score:** **Treatment effective:** ❑ **Yes** ❑ **No**
If treatment is effective • How long should it continue? (usually 4–6 mths) • Record date it should be stopped • Who will stop it? • If GP, are they aware of this?	**Continued regimen:** **Anticipated discontinuation date:** **GP informed:** ❑ **Yes** ❑ **No**
If treatment is ineffective • Consider alternative treatment/agent (With washout period if appropriate) • Consider psychiatric referral	**Action and further treatment plan:**
Planned withdrawal of treatment • Repeat measurement prior to stopping treatment • Warn patient/family about rebound symptoms • Graded withdrawal over 1–2 months	**Review date:** ____/____/____ **Repeat Assessment score:** **Plan for graded withdrawal:** **Planned review date:** **By whom:**

Appendix 5. Information for patients, families and carers

Depression after brain injury and the use of antidepressant medication

THIS INFORMATION MAY BE PHOTOCOPIED

Why does depression occur following brain injury?

Brain injury can result in major life changes for affected people and their families. Often feelings of grief and despair occur as part of a normal reaction to the loss of previous life style and relationships. This type of depression may not respond to tablets, but will hopefully ease over time as people adjust to their new circumstances.

Sometimes the brain injury itself can lead to symptoms such as fatigue, loss of appetite, or difficulty with concentrating, or initiating activities. Some of these symptoms may mimick depression and it can be quite hard to determine whether someone is indeed depressed.

However, in some cases the brain injury itself can also lead to depression of mood by altering the balance of certain biochemicals in the brain. This can result in a feeling of deeper gloom, or of general tiredness, hopelessness and poor motivation which may affect the person's ability to engage in rehabilitation. These symptoms of depression will often respond to a limited course of antidepressant treatment, and for some people this response can be quite remarkable. It is therefore important to identify when depression is the problem, and to offer treatment when appropriate.

As part of your assessment, your doctor or another member of the team will ask you some questions about your mood, and they may ask you to complete a questionnaire and repeat this on a later occasion in order to assess how your mood is changing.

What do antidepressants do?

Antidepressants can help to restore the brain to a more normal biochemical balance, and thus elevate the mood back to its usual level. Some individuals find them very helpful – others less so. Often the only way of knowing whether or not they will help you is to try them and to monitor carefully whether your mood improves during treatment. They do not replace listening to your concerns, or providing practical help with the problems you face, but they can help.

Which antidepressant will I have?

There are many different antidepressant tablets to choose from. Some are more potent then others, some are longer-acting, and many have other effects which may or may not be desirable. Your doctor will weigh all this up in determining which particular antidepressant to recommend for you, and will explain to you the reasons for this choice.

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Are the drugs addictive? Will I get dependent on them?

Current medical advice is that antidepressants are not addictive, unlike sedative drugs such as 'Valium'. Antidepressants are not 'uppers' or 'pep pills' and do not make any difference to people who do not have depressive illness. Usually treatment for 4–6 months is sufficient to restore the normal balance of mood, and they may then be withdrawn. If you subsequently become depressed again, another course can be given. When antidepressants are used in limited courses, as opposed to continuous treatment, people rarely become dependent on them.

Are there any side-effects?

Of course all drugs potentially have side-effects, but the antidepressant drugs we use today are in widespread use and are generally judged to be safe. The majority of patients taking them experience no or few side-effects and, when used properly, the benefits are shown to outweigh any disadvantages. Fear of side-effects should not, therefore, stop you from taking antidepressant drugs.

However, there are some circumstances in which antidepressants are best avoided.

- They should not be given to people with uncontrolled epilepsy, and doctors must make sure that they do not interact with any other medications you are taking.
- Any drug can cause an allergic reaction, so if you experience any rash or other symptom which you suspect may be a side-effect, you should report this.
- Minor symptoms such as dry mouth and stomach upsets can occur, but usually resolve over time, so it is worth persisting with treatment to see if this happens. Otherwise the symptoms will resolve on stopping medication.

Different drugs have different potential side-effects, and if you experience any possible side-effects and are concerned about them you should discuss them with your doctor – it may be appropriate to try a different agent.

How will I know if they are working?

For many people with depression following brain injury, antidepressants are extremely helpful, but not in all cases. Nobody wants to be on tablets which are not helping them, so we normally regard the first 6–8 weeks of treatment as a 'try-out' period. You can see how you feel at the end of that time, and you can decide together with your doctor whether or not it is worth continuing the full course.

Typically you will start on a low dose. Most patients notice an improvement in mood within 1–2 weeks. If there has been no response (or very little) after 2 weeks, the dose may be increased. At the end of the first 6–8 weeks, treatment is reviewed. If you and your doctor feel that the treatment has been worthwhile, it will be continued – usually for 4–6 months. If there has been no response, the treatment will be stopped and alternative treatment options discussed.

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What will happen if I am discharged from hospital?

You will be given a short supply of medications on discharge from hospital. Your GP will be notified about the tablets you are on and the recommended length of treatment. You should make an appointment to see your GP who will issue further prescriptions for you to obtain the drugs from your pharmacy. You should see your GP *at least* every 2 months whilst on treatment. It is important that you take your medication strictly as directed, and that you do not stop the drugs suddenly during the treatment period.

How will I know when to stop?

If the treatment is effective and you decide to continue the full course, it is normally recommended that you remain on the tablets for 4–6 months. At the end of that time, you should see your GP and arrange to end the course. Rather than stopping suddenly, your doctor will normally recommend tailing the tablets off gently. It normally takes 1–2 months to withdraw safely from treatment. As the brain re-balances itself off the medication, it is quite common to feel a bit low for the initial 3–4 weeks after stopping the tablets. However, this is not a sign that you need to re-start the treatment. Usually the mood stabilises after 1–2 months, but if it does not you should consult your GP.

Who do I ask if I have any other questions?

If you have any other questions, ask one of the doctors who will be pleased to help. If in doubt, your key-worker will find someone who can answer your specific queries.

Contact details for further help

Depression Alliance
Tel: 0845 1232320
www.depressionalliance.org

The Encephalitis Society
Tel: 01653 699599
www.encephalitis.info

Headway – the brain injury association
Freephone: 0808 800 2244
www.headway.org.uk

The Stroke Association
Tel: 0845 3033100
www.stroke.org.uk

Brain and Spine Foundation
Tel: 0808 808 1000
www.bbsf.org.uk

BASIC (The Neurocare Centre)
Tel: 0870 750 0000
www.basiccharity.org.uk