Catatonia Guideline:
Assessment, Diagnosis and Management

NHS Lothian

Introduction

This guideline has been produced in the absence of a prior NHS Lothian protocol or guidance document regarding the identification and management of catatonia. A core source of information for the guideline has been the 2023 paper: "Evidence-based consensus guidelines for the management of catatonia: recommendations from the British Association for Psychopharmacology". We have also consulted a number of specialties and stakeholders locally.

This guideline is accompanied by a companion 'Catatonia Bundle' (found here), which is a practical step-by-step guide for individual patients, and can be completed much like the delirium 'TIME Bundle'. We have also gathered useful resources and paperwork in the 'Catatonia Hub' on the intranet. Finally, there is also a new Trak backslash – \catatonia – which is intended to be used within structured ward round reviews to aid documentation and consideration of important elements of management.

We would expect that the primary users of this content will be psychiatrists, but the content is relevant to all others providing care and working with patients with catatonia, wherever the setting.

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1.0 Identification

1.1. Promoting awareness

The prevalence of catatonia (as much as 10-20% depending on setting) is far higher than the rate of identification. Catatonia is frequently missed – in part because of the historical perception of catatonia as a syndrome associated exclusively with schizophrenia. This has led to lack of awareness of the association with other conditions, some of which have a stronger association than that with schizophrenia. The DSM-V and ICD-11 have sought to address this problem by rationalising the diagnostic criteria and establishing catatonia as distinct from schizophrenia.

Psychiatry trainees should be familiarised with catatonia and instructed in the examination for signs of catatonia. This may be accomplished by formal teaching or workplace-based education. Ideally, competency in the recognition, assessment, and management of catatonia would be within training curricula.

1.2. Use of standardised scales/assessments

There are several validated scales. The most commonly used is the Bush Francis Catatonia Rating Scale (BFCRS). It can be used as a screening tool or for monitoring treatment response. An interactive version with definitions of each catatonic sign is available online via MDCalc. ICD-11 also lists these within the diagnostic criteria here.

Some patient groups may be better suited to other scales – such as the Paediatric Catatonia Rating Scale (PCRS).

2.0 Assessment and investigation

2.1 Examination

Several signs of catatonia can be elicited through clinical examination. The standardised examination procedure for the Bush Francis Catatonia Rating Scale is recommended for a consistent approach. Here is a link to how to perform the examination: here.

A general physical and neurological examination should be carried out. It is advisable to complete an examination for Extra Pyramidal Side Effects using the Abnormal Involuntary Movement Scale (AIMS) procedure if the patient is taking antipsychotic medication.

A Lorazepam challenge test, sometimes referred to as the *Lorazepam sedation test,* can support the diagnosis. A test dose of Lorazepam is given, followed by a reassessment of catatonic features at 40 minutes. A positive test is indicated by an over 50% reduction in symptoms. The term *sedation test* refers to the observation that those with catatonia are far less sedated by benzodiazepines

than would ordinarily be expected. Many patients will be 'paradoxically' be more alert following administration – which can offer further evidence to support the diagnosis.

2.2 Universal investigations

Investigations in patients with catatonia serve to:

- identify and manage physical health problems irrespective of the catatonia diagnosis
- allow for identification of potential drivers of the catatonia itself
- allow us to exclude any potential differential diagnoses other than catatonia (to an appropriate degree, judged on the basis of the clinical picture and context).

All patients with catatonia should be considered for the following bloods: FBC, U&E's, LFTs, CK, CRP, TFTs, B12, Folate, Ca^{2+}/Mg^{2+}/Phos, iron studies. This includes a refeeding panel, which is helpful both if there are issues around oral intake, and to compare to if intake drops. It may be useful to make reference to the NHS Lothian Refeeding Guideline.

Where possible, a urinary drug screen should be obtained. A baseline ECG is useful, and can be repeated if there is an antipsychotic being started/increased, if ECT is being considered, if there is electrolyte disturbance or if there is other/unexplained medical deterioration.

In all patients, careful review of what medications they have been exposed to is important, including those which have been started, had a dose-change, or suddenly stopped.

2.3 Targeted investigations

Other investigations may be indicated: syphilis serology, a Blood Borne Virus screen, NMDA and VGKC antibodies, CT/MRI head, EEG, and Lumbar Puncture (anti-NMDA antibodies are sometimes found only in the CSF beyond the acute stage of NMDA encephalopathy). If choice/appropriateness of certain investigations is felt to be unclear, discussion with neurology or neuropsychiatry may be beneficial.

2.4 Children and young people

Paediatric catatonia presents differently in some respects to the classic description in mature/older adults. 'Withdrawal' may include food or fluid refusal, for example, and incontinence is not uncommon. Combativeness is more frequently observed.

2.5 Older adults

Those in later life stages more frequently present with catatonic stupor and hypokinetic signs. This patient group are more likely to have a physical health cause/driver of catatonia, and so thorough consideration of investigations is advised. Particular care needs to be taken to delineate from other differentials such as delirium, psychosis, seizure activity, stroke, dementia and coma.

2.6 Patients with intellectual disabilities and/or autism

In autism, the terms 'catatonia-like deterioration in autism' and 'autistic catatonia' are sometimes used. Catatonia may sometimes be a form of stress response in autism, and it is important to identify any psychosocial stressors which have precipitated its development.

There is often more fluctuation in symptoms, with periods of posturing, excitement, and typical function all sometimes observed over short intervals. Echophenomena are common, and care must be taken to distinguish baseline from acute deterioration. Severe self-injurious behaviour may be one manifestation of autistic catatonia and may respond to the same treatments, including ECT.

Manifestations of catatonia in autism may be organised as follows (Shah, 2019):

- Primary difficulties/manifestations – increased slowness, movement difficulties (freezing There is often more fluctuation in symptoms, with periods of posturing, excitement, and typical function all sometimes observed over short intervals. Echophenomena are common, and care must be taken to distinguish baseline from acute deterioration. Severe self-injurious behaviour may be one manifestation of autistic and becoming 'stuck'), movement abnormalities, prompt dependence, passivity and apparent lack of motivation, posturing, periods of shutdown, catatonic excitement, fluctuations of difficulty
- Secondary difficulties and autism breakdown – social withdrawal and communication problems, decline in self-help skills, incontinence, 'challenging' behaviour, mobility and muscle wastage, physical problems, breakdown
- Consequences for the individuals and their families – inability to attend school, college or work, or cope with everyday life; stress for families and carers

Given potential symptom overlap and the risk of diagnostic overshadowing, it is sensible to compare 'baseline' and current presentation in each domain of relevance. One such structured tool is the Autism Catatonia Evaluation (ACE-S) (Shah, 2019), a PDF of which is accessible on the Catatonia Intranet page.

3.0 Treatment

3.1 Acute

Acute catatonia has a higher response rate to benzodiazepines than chronic catatonia. The first line treatment is Lorazepam. If an as-required dose has previously been given without any observed benefit, then the regular dose should be started at a higher dose.

Dosing can start at 1mg four times daily, or 2mg twice daily. Given the expectation that oral intake and activity levels may be best ~30-60 minutes after administration, timings may be chosen with reference to mealtimes.

The dose should be increased at 2-to-3-day intervals if there is no initial response (and some regions suggest more rapid increases e.g. up by 2-4mg every 1-2 days). After 2mg four times daily is

reached, doses can either be given more often than four times per day, or the individual doses can be increased above 2mg.

Some patients may be unable to take Lorazepam orally (either tablet or oral solution), which may be due to negativism, psychosis, agitation, poor swallow or declining oral intake. In this case administration can be via intramuscular or intravenous route. Hesitancy around escalation of doses risks patients missing out on potential treatment response, and worsening of their clinical condition.

Consultant oversight is particularly important when high doses of Lorazepam are required, to ensure safe prescribing and balancing of risks against benefits. Doses as high as 48mg per day have been recorded in rare cases, but the vast majority of patients respond well to much lower amounts. The most suitable care setting for care and treatment should be considered, according to each individual patient's needs.

Often there is a high initial response rate, but this is not always maintained. Loss of initial improvement, requiring increased dose to achieve similar benefit, often heralds the need for ECT. For patients on high doses of Lorazepam, or where there are concerns over sedation, there should be consideration of the availability of Flumazenil.

3.2 Chronic

The first line treatment in chronic catatonia is also Lorazepam. However, there is a lower response rate than in acute catatonia. There is some evidence that a low serum iron predicts a poorer response to benzodiazepines. As with acute catatonia, inadequate response is an indication for ECT. Clozapine may be beneficial where psychosis is present.

3.3 Manic delirium

Manic delirium presents a distinct management challenge. The symptomatic treatment for delirium (antipsychotics) can worsen catatonia, while the delirium can prompt special caution in use of the first line treatment of catatonia (benzodiazapines) or discontinuation of these. Some symptoms overlap or may be mistaken for those of the other condition. Treatment of the associated or underlying condition(s) is critical, and meticulous serial assessment of features of each (and response of each to treatment) is key to successful management.

3.4 Neuroleptic malignant syndrome

Dopamine antagonists can exacerbate catatonia or precipitate neuroleptic malignant syndrome. The latter is increasingly viewed as a form of malignant catatonia. If a patient on high doses of antipsychotic medication presents with catatonia, an attempt to reduce the dose in order to ascertain whether an improvement in catatonia results is recommended. If so, but antipsychotic

treatment remains necessary, switching to a low potency (e.g. Quetiapine) or partial dopamine agonist (e.g. Aripiprazole) is preferable.

Consideration of the specific patient circumstances is essential, as uncontrolled psychosis may drive catatonic symptoms, and in which case, the antipsychotic dose may need to be increased, or changed to an alternative.

3.5 Malignant catatonia

Malignant catatonia is characterised by the presence of autonomic disturbance and may be fatal. Immediate treatment is vital. If adequate control is not achieved with benzodiazepines in 48hours (less if deterioration in clinical state) then urgent ECT is indicated. Depending on the levels of physical instability, care in a medical HDU or ICU environment may be required.

3.6 Children and young people

Lower doses of Lorazepam may be used, but titration is according to clinical response, with dosing going up to as high as 24mg per day.

3.7 Older adults

Identification and treatment of any driving/causative factors is key – whether this be physical health or psychiatric. Lorazepam is first-line, but lower doses may be required for response. A starting dose may be 1mg twice daily. Benzodiazepines are recognised as worsening cognition and falls risk in the elderly, but it is important not to avoid their use when indicated for catatonia. Under-treated catatonia also increases falls risk (especially in those who are more frail and sarcopenic), along with a number of other physical health consequences. Assertive and proactive management is encouraged in patients who have lower physiological reserve, especially where oral intake is reducing or biochemistry is becoming deranged.

3.8 Intellectual disability and/or autism

Intellectual disability

Broadly the same doses of Lorazepam are used as in the general adult population, although it is prudent to begin with a lower dose (1mg twice daily) and titrate upwards according to response.

Autism

Patients with autism and/or intellectual disability can still have catatonia secondary to physical health issues, or a mental illness, and it is essential not to allow diagnostic overshadowing to lead to inappropriate under-investigation. However, catatonia may be present in autism without other diagnoses, often (but not always) in the context of psychosocial stressors.

There is huge variation in symptom expression between individuals, and contributing aetiologies. Consequently, holistic assessment is needed to reach a successful management plan. Key to this is the identification (when possible) and management of precipitating stressors.

In mild catatonia, psychology and formulation-driven interventions may be the sole treatment. A 'Psycho-Ecological Approach' (Shah, 2019) may be one such model. The core facets of this are:

i. Psychological and ecological assessment and formulation
ii. Identifying individual stress, anxiety and non-coping
iii. Increasing awareness and avoiding misdiagnosis
iv. Psycho-education and training
v. Reviewing and withdrawing 'culprit' psychiatric medication
vi. Early identification
vii. Increasing structure, routine and consistency
viii. Implementing immediately strategies of support
ix. Activity and stimulation therapy
x. Reducing decision making
xi. Management of specific problems
xii. Psychological interventions and support for high functioning autistic individuals

In more severe catatonia, or when psychological interventions alone have not been beneficial, pharmacological and neuro-modulatory treatments are considered in the same fashion as with the general population. Psychological work may be utilised in collaboration. There is some evidence that Lorazepam treatment may be less effective for catatonia than is typically seen in the general population.

4.0 Underlying/associated conditions

4.1 Implications for management

Management in pregnancy is not addressed in this guideline, but reference can be made to the British Association of Psychopharmacology 2023 guidelines for the evidence base. Equally, those with renal, liver and respiratory disease may require specific consideration of Lorazepam doses, and potentially more expeditious use of ECT to gain symptom control.

4.2 Antipsychotics in catatonia

Careful consideration should be given to the role of antipsychotics, and the relationship between their prescribing and the development of catatonia.

In some cases, catatonia can be precipitated by antipsychotics, with this being more associated with hypokinesia and a withdrawal presentation. Should the antipsychotic be felt likely to be responsible, withdrawal of this drug should be the first measure. Introduction of Lorazepam may be

considered if there is a lack of, or slow, response. Lower potency or partial antagonist antipsychotics are less implicated, and may be switched to if an antipsychotic is necessitated.

Similarly, if Neuroleptic Malignant Syndrome is felt to have been precipitated, antipsychotics should be withdrawn, and full case review of the indication and lower risk options may be considered further down the line after recovery.

It is important to draw the distinction between the above, and where psychosis is felt to be the driver behind the syndrome of catatonia. In such cases, as the cause should be treated, antipsychotics are indicated. An individual case consideration should be given over the most appropriate agent, and monitoring of any impact on the degree of catatonic features. Clozapine can be efficacious in more chronic catatonia, and it should be noted that withdrawal of Clozapine can even precipitate catatonia itself (in which case re-instating treatment is typically effective).

Antipsychotics should be avoided unless there is a clear indication (e.g. psychosis).

5.0 Pharmacological management

5.1 Benzodiazepines

Lorazepam is the first line choice. In general, catatonia responds more reliably to short-acting benzodiazepines or Z-drugs, but some patients will also respond to longer-acting. Some centres have developed treatment plans using diazepam to allow for less frequent dosing.

Where patients have been treated with Lorazepam, and catatonia resolves, there needs to be patient-tailored consideration around how soon and at what pace to reduce Lorazepam. The treating team should be satisfied that any underlying cause for the catatonia has been appropriately addressed. The rate of reduction is likely to mirror, to some degree, the duration of time they have been on Lorazepam. Reductions should be gradual, with monitoring for recurrence of catatonic symptoms. Prescribers should be mindful of the non-linear change in receptor occupancy with benzodiazepine dose changes, with increasingly small dose reductions being advised to avoid withdrawal or rebound phenomena. On reaching the lowest doses of Lorazepam, conversion may be made to diazepam to facilitate gradual and small reductions. Consideration may be given to the withdrawal schedules here: benzo.org.uk

Another reference text may be the 2024 Maudsley Deprescribing Guidelines. In difficult cases, it may be that discussion with addictions psychiatry may be beneficial.

5.2 Other drug considerations

Other drugs with plausible mechanisms have been tried in catatonia, such as dopamine agonists (e.g. Bromocriptine) or those with other mechanisms (e.g. Memantine and Amantadine are NMDA

receptor antagonists). None are as well established as Lorazepam and ECT, and some may exacerbate or cause psychosis.

Dopamine agonists have been reported in case studies to occasionally relieve catatonia which is resistant to benzodiazepines.

6.0 Electroconvulsive therapy

6.1 Indications

Catatonia is one of the four licensed indications for ECT in terms of the machines used in NHS Lothian. ECT should be considered via emergency referral for patients who have malignant catatonia, or other forms of catatonia where physical health is compromised (typically due to low/absent oral intake).

Non-emergency referral may be considered for those who do not respond, lose response, or have contraindications to effective doses of Lorazepam. Previous positive response to ECT is also relevant. Consideration may also be given to patient dignity and distress, where improvement is markedly slow or appears incomplete.

Whether or not your patient appears to need a referral to ECT at this point in time, it is advisable to prepare the materials required for referral, in case this more urgently becomes indicated. In addition, liaising with the ECT department early is also helpful to enable a dialogue around treatment need, and allow planning. Families may also benefit from information on ECT being provided, so such concepts are understood in advance of them becoming urgently necessitated.

ECT is conducted at both the Royal Edinburgh Hospital and St John's Hospital. Please make reference to the ECT intranet page to aid referral and communication: ECT at REH

Management in pregnancy is not addressed in this guideline, but reference can be made to the British Association of Psychopharmacology 2023 guidelines for the evidence base.

6.2 Technical considerations (frequency, dose)

As per protocol, but even greater importance is paid to postictal baseline suppression. Less than once weekly should only be considered in those requiring maintenance ECT, rather than the acute period. Typically, Lorazepam should be held on the evening before and the morning of treatment, if this is possible, but specific cases can be discussed with the ECT team.

6.3 Legal status (both for ECT and generally)

Many patients with catatonia will not have capacity with regard to elements of their investigation, care and treatment. An Adults with Incapacity Act section 47 certificate should be considered for all

patients, along with the annex 5 to allow a breakdown of what the individual patient does and doesn't have capacity for.

The provisions of the Mental Health Act may be indicated for a number of reasons for patients with catatonia, and there should be a low threshold to consider its use. If referring for ECT and under a CTO, a T3 form should be completed; otherwise a T4 form should be completed.

Should there be challenging nuances around legal status or capacity, discussion with the Mental Welfare Commission may be useful:

- 0131 313 8777
- mwc.enquiries@nhs.scot

7.0 Reviewing progress with treatment

7.1 Monitoring treatment response

For cases where catatonia is severe, response may be visible in terms of oral intake, and degree of time spent immobile or posturing. Beyond this, patients can be re-scored on the Bush Francis Catatonia Rating Scale to determine the degree of severity. It should be noted that distress and impaired quality of life are not directly assessed by such scoring, and MDT appraisal of such factors may also be material to progress.

With ECT, patients may show some response for a short period of time after receiving treatment, with this then waning. It may be found that this period of some improvement lengthens and increases in terms of degree of response. A lack of any response during ECT should prompt consideration of prescribing and ensuring any drivers/causes of catatonia are being addressed.

7.2 When to seek a second opinion

Consider involving other specialties early if the driver is not felt to be psychiatric, or it is challenging to ascertain if there is a driver. Neurology and neuropsychiatry may be able to advise on the likelihood of potential causes of catatonia (e.g. encephalitis), but also on some of the differentials of catatonia itself.

Confidence in the diagnosis of catatonia is important to allow prompt and assertive treatment, and to provide the best outcomes for patients. It is also important to convey diagnostic clarity to the wider MDT, especially to empower each member to provide effective care. It is important to avoid a situation where Lorazepam isn't being given due to stupor being confused for sedation.

Most patients respond to Lorazepam, and even more to ECT, so should patients be refractory to both – it would be reasonable to discuss the case with colleagues/neuropsychiatry prior to progressing to rarer-used treatments such as NMDA receptor antagonists.

8.0 Physical health management while catatonic

8.1 Food and fluid intake

Dangerously low food and fluid intake in catatonia is of particular concern. This can be seen as a marker of severity of catatonia, and also is an indication for urgent ECT. There are clear risks to the patient's physical stability if intake is insufficient, and such a condition risks patients requiring transfer to medical hospitals (where ECT is rarely available). Charting intake on NHS Lothian food and fluid charts is therefore of clear importance, and the accuracy of this is key. A weight and height are essential to take initially and monitor weekly to allow MUST scoring, Dietetic referral/consideration, and to allow consideration of the trajectory.

Some patients have very little intake observed, but can appear to achieve more while not under the observation of others. For this reason, patients may be left food/fluids in their bed space to try to capitalize on this phenomenon. However, this can make accuracy of charting difficult, and patients have been known to drink directly from taps/toilets.

When eating and drinking do occur, at times this can manifest as a form of increased activity, with frenzied rushing of intake. This can create a risk of choking if not managed/monitored. However, these times are opportunities for patients to make-up for long periods of withdrawal.

Bloods, in particular for renal function and a refeeding panel, are often required to guide assessment of patient stability. Regular physical observations are also important. It may be useful to review the NHS Lothian Refeeding Guideline.

Patients who are significantly unwell may progress to 'losing' their oral route due to the degree of withdrawal. At such a point, nasogastric feeding, or transfer to a site which can provide this, should be considered. Medications may need to be rationalized, and Lorazepam administered parenterally. The access to subcutaneous and IV fluids is clearly variable across settings. In some circumstances, discussion can be had with the ECT team as to whether a bag of IV fluids can be given in recovery following ECT. However, this may not be possible and shouldn't be relied upon.

8.2 Skin integrity

The significance of this is related to both the frailty (and past medical history) of the patient, as well as the degree of immobility. Pressure sores may occur in patients who, based on demographics alone, would be low-risk. Review of pressure areas should be conducted regularly, with a low threshold to consider pressure relieving mattresses, pillows, and other adjustments. Regular turning and assessments for skin vulnerability (Waterlow score) should be considered. Patients who are severely catatonic and incontinent may benefit from catheterisation to prevent skin irritation and breakdown, and to preserve dignity.

8.3 Contractures

Patients who have been severely catatonic for long periods are at risk of developing contractures, which risk leaving patients with permanently reduced function and quality of life. Those who are at risk may be discussed with physiotherapy, who may provide advice around positioning and postural management. There is currently a lack of evidence to support passive stretches as an approach.

8.4 Venous thrombus

Both immobility and some common psychiatric medications can increase the risk of venous thromboembolism. This is compounded by an increased risk of infection (especially aspiration pneumonia). Patients with prolonged stasis should be assessed for the suitability of TED stockings (checking that vascular supply wouldn't be compromised) and/or prophylactic Dalteparin.

8.5 Aspiration

Many aspects of catatonia increase the risk of aspiration: positioning, pace of eating, delayed/poor swallowing ability, antipsychotic use and poor ability to follow instructions/advice. This risk is greater with greater impairment, further emphasising the need for prompt identification and treatment to reduce progressing to higher risk states. Routine physical examinations should include auscultation of the chest. Consideration should be given to optimizing oral hygiene, as this can further reduce aspiration risk.

Alertness level should be considered when encouraging a patient to eat and drink, and it may be that at certain times patients are not sufficiently alert to safely do so. Texture modification of foods, as advised by Speech & Language Therapy, may be beneficial to further reduce risk.

8.6 Urinary retention

Urinary retention may go unnoticed in patients who aren't able to verbalise symptoms, are incontinent, or are assumed to be passing urine independently. Routine examination should include palpation for a full bladder, with a low threshold to consider bladder scanning. Undetected retention may result in pain, distress and post-renal acute kidney injury. Catheterisation may be required. Consideration should be given to medical causes for urinary retention, including constipation and urinary tract infections. There should be a low threshold to send urine specimens.

8.7 Oral/eye care

Low oral intake and inability to attend to dental hygiene can increase the risk of candida, painfully dry mouth, cracking lips, and at the severe end, complications including sialadenitis. Moisturiser for lips, hydration sponges and artificial saliva can improve comfort, and make eating more comfortable when this does occur. Good oral care can also reduce the risk of aspiration events.

Catatonic patients can at times have markedly reduced blink rates. Artificial 'tears' can be beneficial to reduce the risk of infection and damage to the eye's surface.

8.8 Toileting/hygiene

Assistance and encouragement should be provided. Menstrual care and products should be considered, and tailored to individual patient need/preferences. Occupational therapy colleagues may advise on suitable adaptations if mobility is limiting the ability to use nearby toilets. As per skin integrity, catheterisation may be considered for those with severe catatonia.

8.9 Pain

Many patients have reduced ability to communicate, including about being in pain. In such circumstances systems like the Abbey Pain Scale can be used. A number of components of catatonia syndrome and complications that result can cause pain, and so empirical simple analgesia may be considered.

8.10 Constipation

Low food/fluid intake, reduced mobility and many psychiatric medications being constipating means that these patients are at greater risk of developing difficult constipation. Bowel charts are essential, with a low threshold for regular laxatives.

8.11 Inability to report new physical health issues

Regular systematic physical examination should be conducted, with the context of the patient's past medical history in mind. Clinicians need to be more proactive to identify such issues. Regular bloods may provide more information, especially when the patient cannot provide a history.

9.0 Role of the MDT in care and treatment

9.1 Physiotherapy

There are several roles for Physiotherapy in catatonic patients. At the more severe end, work to reduce the risk of muscle contractures is very important for long-term outcomes and function. This patient group may develop a degree of sarcopenia from misuse and malnutrition.

For more mobile patients, or those who are fluctuant in presentation, repeated and often dynamic plans around how to reduce falls risk (and support mobility) may be required. This can be particularly important for patients who exhibit periods of excessive activity.

They may advise on suitable mobility aids, or equipment/strategies to facilitate transfers.

For those patients who have previously been immobile and are starting to engage in activity again, there is a role for physiotherapy in general rehabilitation to improve strength, stamina and mobility.

9.2 Occupational Therapy

Environmental assessment can be useful to optimize the patient's safety in the immediately surrounding area. It may be that temporary equipment is required while the patient is more catatonic, to facilitate mobility, dignity and care. Identification and promotion of meaningful activity and engagement is also of value, utilizing a person-centred approach and focussing on sensory strategies.

9.3 Dietitians

Patients may have low intake, or limited variability of intake. The aim is to maintain nutritional state, and reduce the loss of muscle and physiological reserve secondary to immobility. For this reason, advice on what foods to offer, and any supplementation can be very useful.

9.4 Music & Art Therapy

At the time of writing this guideline, there is no evidence base for the use of music or art therapy for catatonic patients. We have retained this section as some individual patients may benefit, and consideration of referral can be made on a case-by-case basis.

Both modalities work to gently support a physical and emotional re-connection, and tend to view catatonia from a trauma perspective, with an assumption that the shutdown and withdrawal are rooted in an overwhelmed emotional state. Work seeks relational connection, and to seek out small and subtle openings to encourage reconnection. Both art and music can be means to create a therapeutic environment, where interaction with others can be tolerable.

Targeted use of music can provide cognitive stimulation to patients, as well as reinforcing of the normal day/night cycle. Choosing music that a patient enjoys when well can also be humanising, and can be a point of connection between staff and an otherwise potentially un-interactive patient.

9.5 Speech & Language Therapy

Much like with fluctuating activity levels necessitating a dynamic plan from Physiotherapy, a varied plan for times of low interactivity compared to high activity, may be needed. In particular for patients whose intake occurs in a rushed fashion, advice to help reduce the risk of choking is hugely important. Communication needs can also be considered, and it may be that Speech & Language Therapy are able to provide advice on 'Augmentative and Alternative Communication', ranging from simple paper-based to more advanced technology.

9.6 Psychology

Psychology can have a role working directly with patients (via assessment, formulation and in providing therapy), but also indirectly through team formulation and case consultation. The latter can be particularly important in working to understand a markedly impaired patient's presentation, and can help empower teams to effectively and appropriately respond. Those with chronic catatonic presentations, especially where biological management has not been straight forward, may benefit from discussion. Psychology can work with the rest of the MDT to make interventions and care as trauma-informed as possible. This may focus on safety, choice, collaboration, empowerment, and building trust.

Prior research has explored the emotions and cognitive experiences of patients while catatonic (Zingela 2022). Prominent themes included overwhelming anxiety, fear, low mood and a sense of being trapped. Should the period of catatonia be considered as a trauma in itself for the patient, later care should bear this in mind. General principles for such patients would include trying to build a sense of safety, helping them to return to structure and routine, and management of PTSD symptoms should they develop. It may be useful to review: NHS Lothian - Trauma

Psychology has a distinct role to play in patients who have autism, where specialist behavioural strategies can be effective in helping to manage symptoms. Please see section 3.8.

10.0 Dignity, quality of life and family

10.1 Getting it right

Catatonia in a relative can be a very strange and confusing syndrome for family members, and a number of the features could be upsetting to witness. There are a number of potential sources of information that they can be directed to:

Royal College of Psychiatrists page on catatonia (there is also an easy read information available)

Some families may wish to know more of the evidence base for treatments – which is well summarized in the 2023 British Association for Psychopharmacology consensus guideline

Some family members may find it beneficial to see the Catatonia Bundle, to appreciate the systematic and thorough approach being undertaken for their relative. Having the full MDT 'on board' and engaged in their own role in the patient's care can also be reassuring.

Consider asking family to fill-in a Getting To Know Me form for their relative, so that care and interactions they receive from the MDT can be personalised, and preferences can be considered. Some patients may wish-for and benefit from chaplaincy input, but this is very much patient-specific.

Catatonia is truly a syndrome which tests a system's ability to provide MDT and patient-centred care. Successful care is joined-up, holistic and involves assertive medical management. Without this, patients can deteriorate psychiatrically, physically, and be at risk of morbidity and even mortality. Admissions may also be prolonged by delays to identification and management.

11.0 Authors and acknowledgements

Authors of this guideline and the associated materials

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- Dr Nadine Cossette – Consultant in Liaison Psychiatry, Royal Infirmary of Edinburgh
- Dr Rebecca Lawrence – Consultant in Addictions Psychiatry, Royal Edinburgh Hospital
- Dr Jonathan Rogers – Psychiatrist and researcher specialising in neuropsychiatric disorders, and particularly catatonia. Lead author of the BAP 2023 catatonia guidelines.

Allied Health Professionals

- Tony Crooks – Clinical Lead Mental Health Physiotherapy, Royal Edinburgh Hospital
- Melanie Hay - Clinical Lead Mental Health S&LT, Royal Edinburgh Hospital
- Alannah Murphy, Rebecca Carpenter and Cherri McCrae – Dietetics, Royal Edinburgh Hospital
- Morna Russell – Occupational Therapy Team Lead, APMHS, Royal Edinburgh Hospital and Associated Services
- Gail LeMasurier and Kate Pestell – Art Psychotherapies, Royal Edinburgh Hospital

- Fiona Mack – Advanced Pharmacist, Royal Edinburgh Hospital
- Dr Audrey Millar – Consultant Clinical Psychologist, Royal Edinburgh Hospital
- Dr Hannah Cooper – Clinical Psychologist, Royal Edinburgh Hospital

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