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Information included is specific to the use of medicines in the adult setting.

1. ‘Think Delirium’

People in hospital or long-term care may be at risk of delirium. Delirium can have serious consequences (such as increase risk of dementia and / or death). It may increase the length of stay of people already in hospital and their risk of new admission to long-term care.

In this context, a multi-disciplinary group was convened within GGC to review the diagnosis, prevention and management of delirium. This led to the development of a new GGC guideline for delirium.

What is delirium?

- Delirium (sometimes called ‘acute confusional state’) is a clinical syndrome characterised by disturbed consciousness, cognitive function or perception, which has an acute onset and fluctuating course.
- It is a common but serious and complex clinical syndrome associated with poor outcomes.
- Delirium may be present when a person presents to hospital or long-term care or may develop during a hospital admission or residential stay in long-term care.

Who is at risk of delirium?

When people first present to hospital or long-term care, assess them for the following risk factors. If any of these risk factors are present, the person is at risk of delirium.

Risk factors for delirium
- Age 65 years or older
- Cognitive impairment (past or present) and / or dementia.
- Current hip fracture
- Severe illness

People with these risk factors should be assessed for recent (within hours or days) changes or fluctuations in behaviour. These may be reported by the person at risk, or a carer or relative. If behavioural changes are present, a healthcare professional who is trained and competent in diagnosing delirium should carry out a clinical assessment to confirm the diagnosis.

Non-pharmacological management of delirium

- Treatment and care should take into account people’s individual needs and preferences.
- In people diagnosed with delirium, identify and manage the possible underlying cause or combination of causes.
- Ensure effective communication and reorientation (for example, explaining where the person is and what your role is) and provide reassurance for people diagnosed with delirium.

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Pharmacological management of delirium
(Refer to the full GGC guideline on delirium and the Therapeutics Handbook ‘Management of acutely disturbed patients, including delirium’ section for more details)

- Avoid the use of antipsychotics in dementia unless it is absolutely necessary and non-drug treatments have failed.
- Short-term drug therapy should only be prescribed if a person with delirium is distressed or considered a risk to themselves or others and verbal or non-verbal de-escalation techniques are ineffective or inappropriate.
- If drug therapy is necessary consider short-term (usually for 1 week or less) haloperidol or olanzapine. Oral therapy is preferred. (Note, this is an unlicensed indication for haloperidol and olanzapine.)
- Start at the lowest clinically appropriate dose and titrate cautiously according to symptoms. Review at least every 24 hours.
- Avoid haloperidol or olanzapine for people with conditions such as Parkinson’s disease or dementia with Lewy bodies in view of the risk of precipitating a Parkinsonian crisis. In such patients lorazepam may be preferred but should be used with caution as it may worsen delirium (note supply issues with lorazepam injection have now resolved, however oral therapy is preferred). Contact a movement disorder specialist for advice wherever possible.

Patient Consent

Patient consent may require use of the Adults with Incapacity (Scotland) Act 2000

- Always document in medical case record reasons for prescribing sedation, indicating review dates.
- Emergency sedation can be given under common law i.e. patient does not need to be detained. More routine sedation however requires consideration of the patient’s capacity to consent.
- Psychiatric services can advise on the use of legislation in this regard.

2. Low Molecular Weight Heparin – dosing advice in….  
...the Presence of Renal Impairment

Heparin and heparin-like anticoagulants vary considerably in their glycosaminoglycan composition, specifically their average chain size (unfractionated heparin (UFH) > low molecular weight heparins (LMWH) > fondaparinux). Even within the LMWH group there can be subtle differences in average chain size (tinzaparin > dalteparin > enoxaparin). These differences have important effects both on the antithrombin-mediated target specificity and dependence on renal clearance. Smaller heparins having a higher anti-factor Xa: anti-factor IIa ratio and a greater dependence on renal clearance. The latter is very relevant when prescribing these agents, either at prophylactic or therapeutic doses for patients with renal impairment.

The GGC Thrombosis Committee has produced dosing recommendations for the use of heparin and heparin-like anticoagulants (UFH, LMWH and the pentasacharide, fondaparinux) in the presence of renal impairment.

This guidance is based on expert opinion and offers pragmatic local application of the limited evidence base in the literature.

...Patients with Very High or Very Low Body Weight

Occasionally, patients with very high or very low body weight will require prophylactic or therapeutic heparin treatment. Unfortunately, most clinical studies on which licences are based included very few patients at these extremes of body weight. Furthermore, dosing advice from manufacturers of different LMWHs in patients with high body weight differs. LMWH clearance seems to be faster in patients with a high body mass index.

Several different approaches have been suggested for LMWH dose modifications in patients at very high body weight. The GGC Thrombosis Committee has reviewed the literature and produced dosing guidance which favours a conservative approach to increased dosing of LMWH at high body weight.

REMEMBER
When prescribing LMWH for treatment or prophylaxis consider renal function and body weight
Refer to GGC guidance and / or contact haematology or pharmacy for advice

www.ggcprescribing.org.uk
3. Update to Guidance on the Management of Paracetamol Overdose

- Following the publication and distribution of the GGC Therapeutics: A Handbook for Prescribing in Adults in August 2012, the Commission on Human Medicines (CHM) has reviewed the use of IV acetylcysteine for the treatment of acute paracetamol overdose and issued new guidance.

- This review means that the guidance for the Treatment of Paracetamol Overdose contained within the printed version of the GGC Therapeutics Handbook 2012 is no longer up to date.

- The online version of the Therapeutics Handbook on StaffNet and the GGC prescribing website has now been updated.

- Ward copies of the Handbooks will be overlabelled, where possible.

- If not overlabelled, users should score out the affected pages of the Handbook (pages 37 – 40) and annotate with ‘Refer to online version or Toxbase’.

- The acetylcysteine IV monograph has also been updated and these will be circulated to wards and departments via existing mechanisms.

- IV acetylcysteine prescription and administration charts have been in use in some areas. These are currently being updated to reflect the new guidance and will be disseminated in due course. In the meantime, use blank infusion charts and ensure all old charts are removed from clinical areas.

4. Guideline news

SIGN and NICE clinical guidelines
Guidelines produced since July 2012 are highlighted:

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Available at [www.sign.ac.uk](http://www.sign.ac.uk) or [www.nice.org.uk](http://www.nice.org.uk).

NHS GGC Acute Care clinical guidelines
Guidelines recently reviewed by the Medicines Utilisation & Prescriber Education subcommittee of ADTC are:

- Thromboprophylaxis Guidelines for Orthopaedic Patients
- Stability / compatibility table for oxycodone 50mg/ml concentrate injection when used in a subcutaneous infusion
- The use of collagenase *Clostridium histolyticum* (Xiapex®) in Dupuytren’s Disease
- Antiplatelet therapy for secondary stroke prevention

Approved versions will be available on StaffNet via the Clinical Info button.

5. PostScript Extra

The latest issue ([no. 20](http://www.ggcprescribing.org.uk)) discusses the new oral anticoagulants.

The next issue due out this month will discuss ‘drug induced QT prolongation’.

All PostScript bulletins, are available on the GGC Prescribing website available by clicking [here](http://www.ggcprescribing.org.uk).