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AIMS

The aim of this project is to improve patient safety by looking at the use of rapid tranquilisation on an acute medical unit (AMU) in a busy London teaching hospital (UCLH). The hypothesis of the project was that Rapid Tranquilisation may not be used or being documented as effectively as possible. This is due largely to lack of knowledge and confidence around its use by doctors working on an acute medical ward.

OUTCOME MEASURES

Use of Rapid Tranquilisation Medications are used in accordance with UCLH, "Rapid Tranquilisation in Adults" guidelines. This includes an assessment about the medications used if their use was justified and that appropriate documentation of monitoring occurred.

METHODS

The project involved initially conducting a survey of junior doctors on the AMU about their knowledge of and confidence in prescribing rapid tranquilisation. Following this survey I then analysed every patient episode on AMU in November 2021. I audited whether patients were being correctly prescribed rapid tranquilisation, and whether monitoring was being correctly documented.

RESULTS

The initial survey showed a wide disparity in doctors' experience of managing agitated patients. 40% of doctors were "not at all confident" in prescribing rapid tranquilisation. There was a consensus that accessing information on managing agitated patient could be improved. In the audit of patient episodes in November 2021; ten patients (out of over 571) were given rapid tranquilisation. There was a total of 53 episodes of rapid tranquilisation being used. The most common medication used was Lorazepam. 4 of the patients were being treated for a likely delirium (underlying organic cause). On the whole rapid tranquilisation was used appropriately. Several problems are discussed below.

Problems

- LIMITED DOCUMENTATION – ESPECIALLY OF THE LEGAL BASIS UPON WHICH RAPID TRANQ WAS GIVEN

- IN 6 OF THE 10 PATIENTS; WHEN RAPID TRANQUILISATION WAS AT LEAST ONE SET OF OBSERVATIONS AFTER RAPID TRANQUILISATION WAS GIVEN.

- IN 4 OF THE 10 PATIENTS; VITALS WERE NOT CARRIED OUT – BUT THERE WAS AN EXPLANATION FOR THIS.

- IN NO INSTANCES WHERE RAPID TRANQUILISATION WAS USED, WAS THERE DOCUMENTATION THAT OBS WERE RECORDED EVERY 15 MINS FOR THE FIRST HOUR.

WHAT IS BEING DONE TO MAKE IMPROVEMENTS

This project is ongoing and the interventions are currently being implemented. A further survey of 15 AMU Drs, answered "What would be helpful in improving your knowledge of managing agitated patients?"; 66.6% wanted further teaching sessions, 60% wanted a template to aid documentation following the use of rapid tranquilisation. Producing a poster with a simple user-friendly algorithm was most popular (80%).

CONSIDERING RAPID TRANQUILISATION?
SOURCE - RAPID TRANQUILISATION IN ADULTS: UCLH TRUST GUIDELINES

ATTEMPT TO DE-ESCALATE THROUGHOUT
Always offer oral medication first line. Parenteral medication if unable to offer oral.

1
Lorazepam PO 1 - 2mg (0.5 - 1mg if >75)
Max 4mg/24hr
Max 2mg/24hr if >75
Repeat after 45-60mins

Lorazepam IM 1 - 2mg (0.5 - 1mg if >75)
Max 4mg/24hr
Max 2mg/24hr if >75
Repeat after 30-60mins

Midazolam IM 7.5mg (2.5mg if >75)
Max 15mg/24hr
Max 7.5mg/24hr if >75
Repeat after 50-60mins
Avoid for 2hrs either side of other sedatives

2
Promethazine PO 25 - 50mg (12.5 - 25mg if >75)
Max 100mg/24hr
Repeat after 45-60mins

Promethazine IM 25 - 50mg (12.5 - 25mg if >75)
Max 100mg/24hr
Repeat after 30-60mins

IF >75 NO FURTHER IM DRUGS BEYOND THIS

3
Olanzapine PO 10mg (2.5mg if >75)
Max 20mg/24hr
Max 10mg/24hr if >75
Do not repeat sooner than 8hrs

Haloperidol PO 5mg
Max 20mg/24hr
Repeat after 45-60mins
CONTRAINDICATED IF >75

Olanzapine IM 5-10mg
Max 20mg/24hr
Repeat after 50-60mins
Avoid within 1hr of IM benzodiazepines

Aripiprazole IM 9.75mg
Max 30mg/24hr
Repeat after 50-60mins
CONTRAINDICATED IF >75

Haloperidol IM 5mg
Max 20mg/24hr
Repeat after 50-60mins
CONTRAINDICATED IF >75

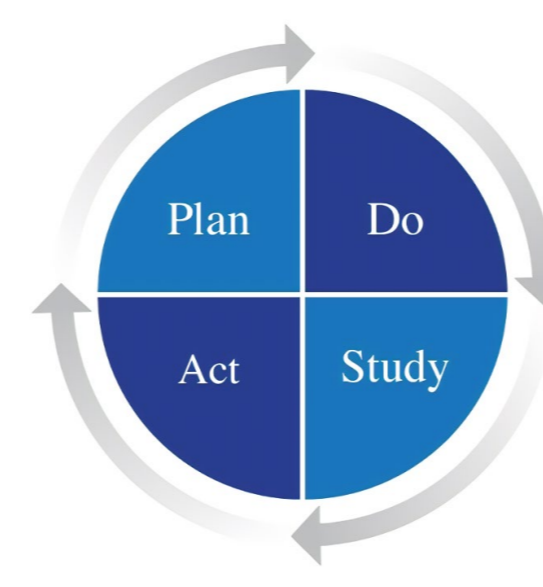
4
Consider parenteral medication
Contact liaison psychiatry

Diazepam IV 10mg
Give over 5mins
Repeat after 5-10mins up to 3 times
If sufficient control obtain psychiatry

Additional considerations

- Exclude metabolic causes e.g. sodium, hypoglycaemia, drug or alcohol withdrawal
- If >75 increased risk of falls and confusion - reduce doses and use with caution
- Before offering Haloperidol or FZD to reduce risk of QTc prolongation
- Observe vitals every 15mins for 1st hour then hourly until patient is comfortable/ready to reassess
- Decision to implement rapid tranquilisation must be made by senior decision maker
- After Action Review (AAR) must be facilitated and Data must be submitted
- Ensure availability of reversal agents e.g. Flumazenil or physostigmine

CREDITS - UCLH EMERGENCY DEPARTMENT - CONSULTANT SERGIO SAWH, SPR WALID GHANDOUR, JCF JUN LIAO uclh



Timeline so far: Audit of Nov 21' patients and initial junior doctor survey (Jan 22'). Presentations to liaison department and AMU (Feb-March 22'. Further survey of AMU Drs (March-April 22')

WHAT IS NEXT

- ✓ Teaching to improve confidence, and awareness of importance of documentation of monitoring and legal requirements.
- ✓ Dissemination of poster (see above) including treatment algorithm.
- ✓ Roll out of "Rapid Tranquilisation Template" on local EPR (see below) which will have several "prompts" including the legal basis of use rapid tranquilisation.
- ✓ I will re-survey junior doctors and re-audit the notes of patient episodes in July 2022.

Rapid tranquillisation template

Brief description of incident (please include details such as the time the incident happened, if there was an obvious cause and who was present when the incident occurred.)

Legal status		
Informal/Voluntary	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Under DOLS	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Under Mental Health Act	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Please specify type:

Under what legal basis is patient being given rapid tranquilisation		
Under mental capacity act	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Under mental health act	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Other	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Please complete capacity assessment:
Please specify type:
Details:

Interventions		
Verbal de-escalation attempted?	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Details: