Year 3 Case-based Learning 2024-25

Case 2 Part 2

Facilitator Materials

Key Contributors:

Michael Trimble – Academic Lead for Year 3 CBL

Philip Toner – Academic Lead for Year 3

Amy Taylor – ADEPT Fellow 2021-22

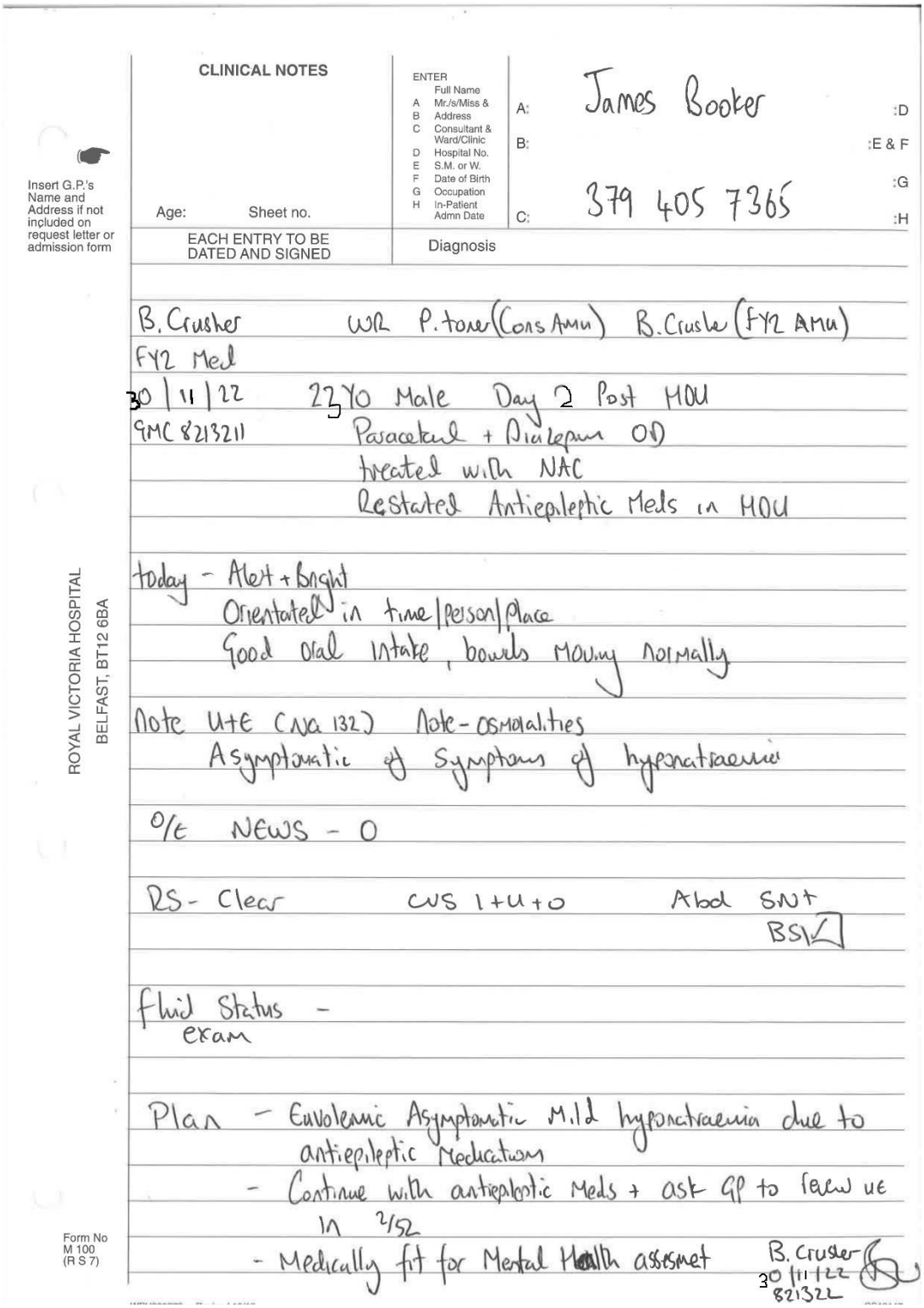
Contents

STUDENT MATERIALS

Patient background

James Booker is a 23-year-old man on a general medical ward. He was BIBA to ED unconscious and managed for an intentional mixed overdose of paracetamol and diazepam in HDU. He is now maintaining his own airway and has restarted his antiepileptic medication (levetiracetam). He has been stepped down to a medical ward for psychiatric assessment prior to discharge.

Medical ward round



CLINICAL NOTES

ENTER
Full Name
A Mr./s/Miss &
B Address
C Consultant & Ward/Clinic
D Hospital No.
E S.M. or W.
F Date of Birth
G Occupation
H In-Patient Admn Date

A: James Booker :D
B: :E & F
C: 379 405 7365 :G :H

Insert G.P.'s Name and Address if not included on request letter or admission form

Age: Sheet no.

EACH ENTRY TO BE DATED AND SIGNED

Diagnosis

B. Crusher WR P. Jones (Cons Amu) B. Crusher (FY2 AMU)
FY2 Med
30/11/22 23 Yo Male Day 2 Post MOU
GMC 8213211 Paracetamol + Diazepam OD
treated with NAC
Restated Antiepileptic Meds in MOU

today - Alert + Bright
Orientated in time/person/place
Good oral intake, bowels moving normally

Note U+E (Na 132) Note - osmolalities
Asymptomatic of Symptoms of hyponatraemia

O/E NEWS - 0

RS - Clear CVS 1+U+0 Abd SNT
BS ✓

fluid Status -
exam

Plan - Euvolaemic Asymptomatic Mild hyponatraemia due to antiepileptic Medications
- Continue with antiepileptic Meds + ask GP to review U+E in 2/52
- Medically fit for Mental Health assesmet B. Crusher 30/11/22 8213211

ROYAL VICTORIA HOSPITAL
BELFAST, BT12 6BA

Form No M 100 (R S 7)

Text:

379 405 7365 BOOKER James, age 23

B Crusher FY2 Med

30/11/22 08.30 WR P. Toner (Cons AMU), B Crusher (FY2 AMU)

23 YO male D2 Post HDU

Paracetamol and diazepam OD

Treated with NAC

Restarted antiepileptics in HDU

Today – alert and bright

Orientated in time/person/place

Good oral intake, bowels moving normally

Note U&E (Na 132) Note – osmolalities

Asymptomatic of symptoms of hyponatraemia

O/E NEWS 0

RS – Clear CVS I + II + 0 Abd SNT BS normal

Fluid status:

Impression: Euvolaemic asymptomatic mild hyponatraemia due to antiepileptic medication

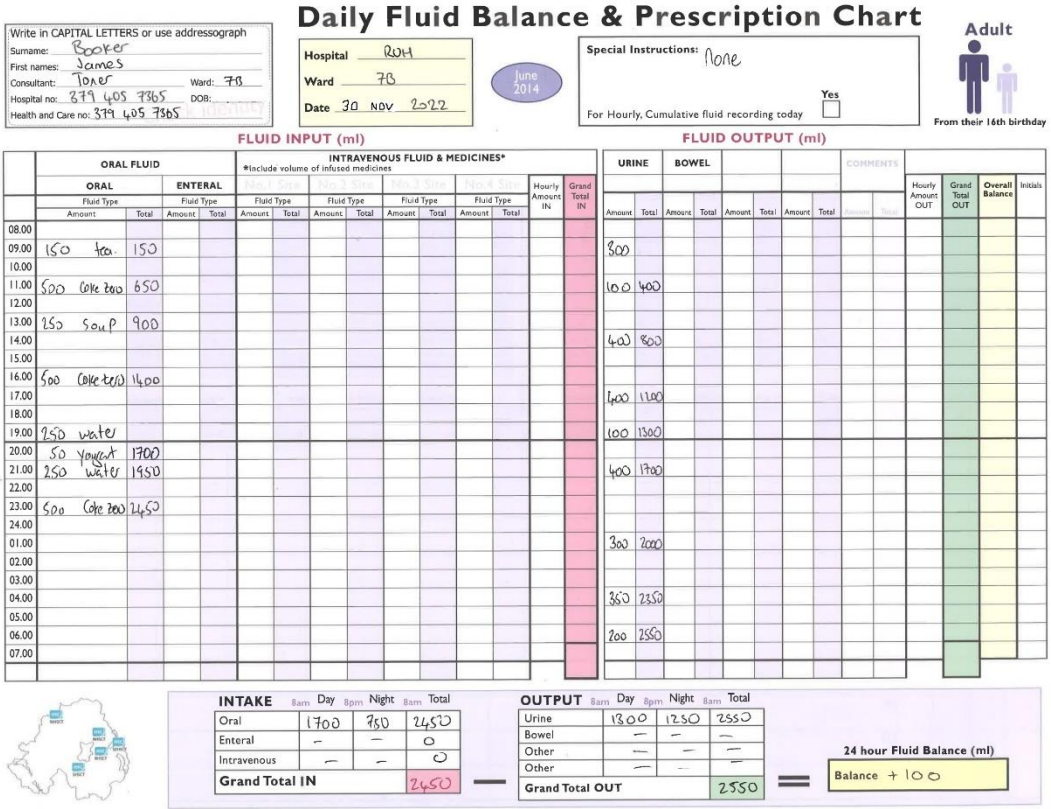
Plan: Continue with antiepileptic meds

GP to review U&Es in 2/52

Medically fit for health assessment

Signed B Crusher 30/11/22 821322

Fluid balance chart



Daily Fluid Balance & Prescription Chart

Write in CAPITAL LETTERS or use addressograph
Surname: Booker
First names: James
Consultant: Toner
Ward: 7B
Hospital no: 379 405 7365
DOB:
Health and Care no: 379 405 7365

Hospital: RUH
Ward: 7B
Date: 30 NOV 2022

June 2014

Special Instructions: None
For Hourly, Cumulative fluid recording today: Yes

Adult
From their 16th birthday

FLUID INPUT (ml)

	ORAL FLUID				INTRAVENOUS FLUID & MEDICINES* *Include volume of infused medicines									
	ORAL		ENTERAL		No.1 Site		No.2 Site		No.3 Site		No.4 Site		Hourly Amount IN	Grand Total IN
	Fluid Type		Fluid Type		Fluid Type		Fluid Type		Fluid Type		Fluid Type			
	Amount	Total	Amount	Total	Amount	Total	Amount	Total	Amount	Total	Amount	Total		
08.00														
09.00	150 Tea	150												
10.00														
11.00	500 Coke Zero	650												
12.00														
13.00	250 Soup	900												
14.00														
15.00														
16.00	500 Coke Zero	1400												
17.00														
18.00														
19.00	250 water													
20.00	50 Yogurt	1700												
21.00	250 Water	1950												
22.00														
23.00	500 Coke Zero	2450												
24.00														
01.00														
02.00														
03.00														
04.00														
05.00														
06.00														
07.00														

FLUID OUTPUT (ml)

	URINE		BOWEL						COMMENTS		Hourly Amount OUT	Grand Total OUT	Overall Balance	Initials
	Amount	Total	Amount	Total	Amount	Total	Amount	Total	Amount	Total				
08.00														
09.00	800													
10.00														
11.00	100	400												
12.00														
13.00	400	800												
14.00														
15.00														
16.00	300	1100												
17.00														
18.00														
19.00	100	1300												
20.00														
21.00	400	1700												
22.00														
23.00														
24.00														
01.00	300	2000												
02.00														
03.00														
04.00	350	2350												
05.00														
06.00	200	2550												
07.00														

INTAKE	8am Day	8pm Night	8am Total
Oral	1700	750	2450
Enteral	–	–	0
Intravenous	–	–	0
Grand Total IN			2450

—

OUTPUT	8am Day	8pm Night	8am Total
Urine	1300	1250	2550
Bowel	–	–	–
Other	–	–	–
Other	–	–	–
Grand Total OUT			2550

=

24 hour Fluid Balance (ml)
Balance + 100

Text:

379 405 7365 BOOKER James, age 23, ward 7B

Yesterday's date 29 Nov 2022

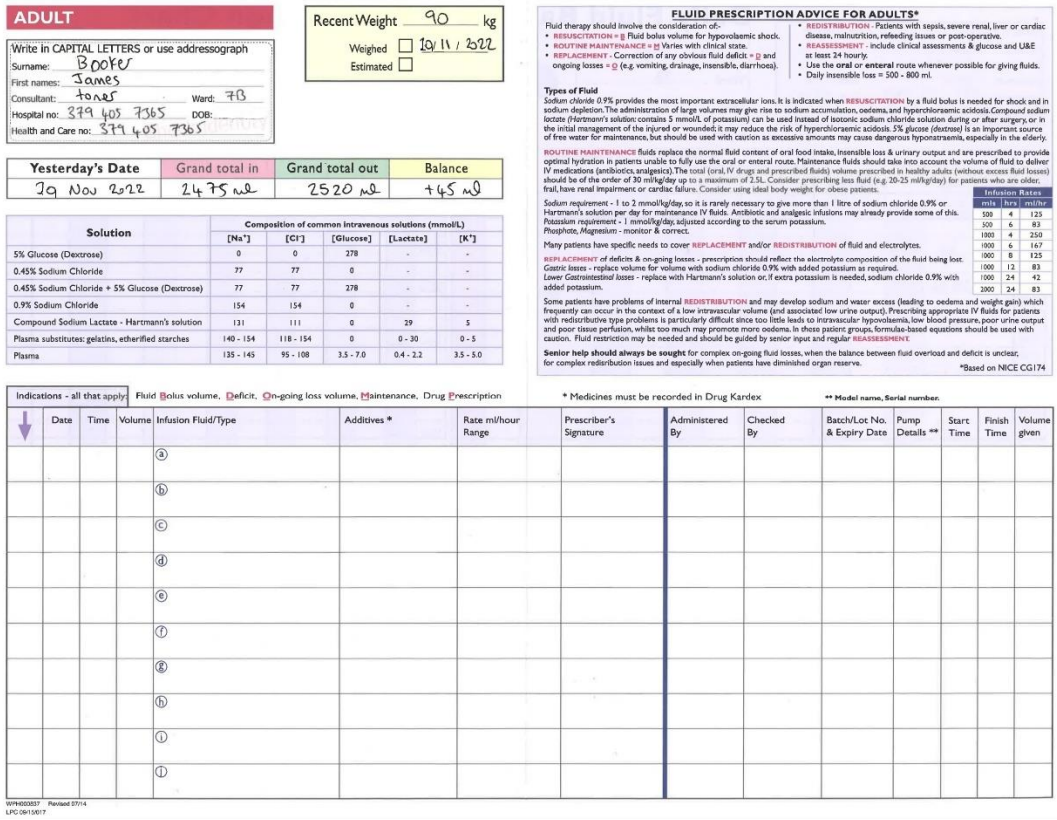
Grand total in 2475ml

Grand total out 2520ml

Balance +45ml

Recent weight 90kg

Weighed 30/11/2022



ADULT

Write in CAPITAL LETTERS or use addressograph

Surname: Booker
First names: James
Consultant: Jones Ward: 7B
Hospital no: 379 405 7365 DOB:
Health and Care no: 379 405 7365

Recent Weight 90 kg
Weighed ☐ 29/11/2022
Estimated ☐

Yesterday's Date	Grand total in	Grand total out	Balance
29 Nov 2022	2475 ml	2520 ml	+45 ml

Solution	Composition of common intravenous solutions (mmol/L)				
	[Na+]	[Cl-]	[Glucose]	[Lactate]	[K+]
5% Glucose (Dextrose)	0	0	278	-	-
0.45% Sodium Chloride	77	77	0	-	-
0.45% Sodium Chloride + 5% Glucose (Dextrose)	77	77	278	-	-
0.9% Sodium Chloride	154	154	0	-	-
Compound Sodium Lactate - Hartmann's solution	131	111	0	29	5
Plasma substitutes: gelatins, etherified starches	140 - 154	118 - 154	0	0 - 30	0 - 5
Plasma	135 - 145	95 - 108	3.5 - 7.0	0.4 - 2.2	3.5 - 5.0

FLUID PRESCRIPTION ADVICE FOR ADULTS*

Fluid therapy should involve the consideration of:-
- RESUSCITATION = R Fluid bolus volume for hypovolaemic shock.
- ROUTINE MAINTENANCE = M Varies with clinical state.
- REPLACEMENT - Correction of any obvious fluid deficit = D and ongoing losses = O (e.g. vomiting, drainage, insensible, diarrhoea).
- REDISTRIBUTION - Patients with sepsis, severe renal, liver or cardiac disease, malnutrition, refeeding issues or post-operative.
- REASSESSMENT - include clinical assessments & glucose and U&E at least 24 hourly.
- Use the **oral or enteral** route whenever possible for giving fluids.
- Daily insensible loss = 500 - 800 ml.

Types of Fluid

Sodium chloride 0.9% provides the most important extracellular ions. It is indicated when RESUSCITATION by a fluid bolus is needed for shock and in sodium depletion. The administration of large volumes may give rise to sodium accumulation, oedema, and hyperchloraemic acidosis. *Compound sodium lactate (Hartmann's solution* contains 5 mmol/L of potassium) can be used instead of isotonic sodium chloride solution during or after surgery, or in the initial management of the injured or wounded; it may reduce the risk of hyperchloraemic acidosis. *5% glucose (dextrose)* is an important source of free water for maintenance, but should be used with caution as excessive amounts may cause dangerous hyponatraemia, especially in the elderly.

ROUTINE MAINTENANCE fluids replace the normal fluid content of oral food intake, insensible loss & urinary output and are prescribed to provide optimal hydration in patients unable to fully use the oral or enteral route. Maintenance fluids should take into account the volume of fluid to deliver IV medications (antibiotics, analgesics). The total (oral, IV drugs and prescribed fluids) volume prescribed in healthy adults (without excess fluid losses) should be of the order of 30 ml/kg/day up to a maximum of 2.5L. Consider prescribing less fluid (e.g. 20-25 ml/kg/day) for patients who are older, frail, have renal impairment or cardiac failure. Consider using ideal body weight for obese patients.

Sodium requirement - 1 to 2 mmol/kg/day, so it is rarely necessary to give more than 1 litre of sodium chloride 0.9% or Hartmann's solution per day for maintenance IV fluids. Antibiotic and analgesic infusions may already provide some of this.
Potassium requirement - 1 mmol/kg/day, adjusted according to the serum potassium.
Phosphate, Magnesium - monitor & correct.

Many patients have specific needs to cover REPLACEMENT and/or REDISTRIBUTION of fluid and electrolytes.

REPLACEMENT of deficits & on-going losses - prescription should reflect the electrolyte composition of the fluid being lost.
Gastric losses - replace volume for volume with sodium chloride 0.9% with added potassium as required.
Lower Gastrointestinal losses - replace with Hartmann's solution or, if extra potassium is needed, sodium chloride 0.9% with added potassium.

Some patients have problems of internal REDISTRIBUTION and may develop sodium and water excess (leading to oedema and weight gain) which frequently can occur in the context of a low intravascular volume (and associated low urine output). Prescribing appropriate IV fluids for patients with redistributive type problems is particularly difficult since too little leads to intravascular hypovolaemia, low blood pressure, poor urine output and poor tissue perfusion, whilst too much may promote more oedema. In these patient groups, formulae-based equations should be used with caution. Fluid restriction may be needed and should be guided by senior input and regular REASSESSMENT.

Senior help should always be sought for complex on-going fluid losses, when the balance between fluid overload and deficit is unclear, for complex redistribution issues and especially when patients have diminished organ reserve.

*Based on NICE CG174

Infusion Rates		
mls	hrs	ml/hr
500	4	125
500	6	83
1000	4	250
1000	6	167
1000	8	125
1000	12	83
1000	24	42
2000	24	83

Indications - all that apply: Fluid Bolus volume, Deficit, On-going loss volume, Maintenance, Drug Prescription

* Medicines must be recorded in Drug Kardex

** Model name, Serial number.

	Date	Time	Volume	Infusion Fluid/Type	Additives *	Rate ml/hour Range	Prescriber's Signature	Administered By	Checked By	Batch/Lot No. & Expiry Date	Pump Details **	Start Time	Finish Time	Volume given
				ⓐ										
				ⓑ										
				ⓒ										
				ⓓ										
				ⓔ										
				ⓕ										
				ⓖ										
				ⓗ										
				ⓘ										
				ⓘ										

WPH000037 Revised 07/14
LPC 09/15/017

Hospital RVH, ward 7B, date 30 Nov 2022

Intake oral day 1700, night 750, total 2450

Output urine day 1300, night 1250, total 2550

Balance +100

Investigations

Blood work

379 405 7365 BOOKER James (Male/23 years)

Complete Blood Count

Number	1	Ref. Range (Units)
Collected	30-Nov 2022 06:00	
Signed		
Source	BHSCT	
HGB	119	115-165 (g/L)
HCT	0.45	0.37-0.47 (L/L)
WBC	9.4	4.0-10.0 (x 10^9/L)
PLT	199	150-450 (x 10^9/L)
RBC	5.2	3.8-5.8 (x 10^{12}/L)
MCV	79	76-100 (fL)
MCHC	329	320-360 (g/L)
MCH	30	27-32 (pg)
NEUT	5.9	2.0-7.5 (x 10^9/L)
LYMPH	2.5	1.0-3.5 (x 10^9/L)
MONO	0.6	0.2-0.8 (x 10^9/L)
EOSIN	0.3	0.04-0.4 (x 10^9/L)
BASO	0.09	0.01-0.1 (x 10^9/L)

Electrolyte Profile

Number	1	Ref. Range (Units)
Collected	30-Nov 2022 06:00	
Signed		
Source	BHSCT	
Sodium	*132	136-145 (mmol/L)
Potassium	4.8	3.5-5.3 (mmol/L)
Chloride	*92	95-108 (mmol/L)
CO2	29	22-29 (mmol/L)
Urea	7.8	2.5-7.8 (mmol/L)
Creatinine	83	45-84 (µmol/L)
eGFR	>60	<60 (mL/min/1.73m^2)

* Denotes abnormal result

Liver Profile

Number	1	Ref. Range (Units)
Collected	30-Nov 2022 06:00	
Signed		
Source	BHSCT	
T. Bilirubin	11	<21 (µmol/L)
ALP	*131	30-130 (U/L)
AST	*39	<32 (U/L)
GGT	*43	6-42 (U/L)
ALT	*36	<33 (U/L)
Albumin	35	35-50 mg/L

CRP

Number	1	Ref. Range (Units)
Collected	30-Nov 2022 06:00	
Signed		
Source	BHSCT	
C reactive protein (CRP)	*12	<5 (mg/L)

Serum Osmolality

Number	1	Ref. Range (Units)
Collected	30-Nov 2022 06:00	
Signed		
Source	BHSCT	
Serum Osmolality	*272	275-295 (mOsmol/kg)

Urine Osmolality

Number	1	Ref. Range (Units)
Collected	30-Nov 2022 09:00	
Signed		
Source	BHSCT	
Urine Osmolality	315	(mOsmol/kg)

Urinary Sodium

Number	1	Ref. Range (Units)
Collected	30-Nov 2022 09:00	
Signed		
Source	BHSCT	
Urinary Sodium	29	(mmol/L)

Psychiatry Liaison Review: PARIS record

Mr James Booker, age 23, HCN 379 405 7365

Date 30/11/22

Time 15.30

Medical entry by A Collins, CT3, Psych liaison

Reason for review

Referral received to review this 23 year old gentleman who presented to ED after an overdose of paracetamol and diazepam. Now medically fit for discharge.

History of presenting complaint

Mr Booker took a mixed overdose of paracetamol and diazepam (unsure of quantities) three days ago. This was a planned overdose and he had stockpiled medication for it. He had been drinking before taking the overdose. He took it when in the house alone with the intent of ending his life. Prior to taking the overdose he sent a farewell message to his mother who was working a night-shift. He did not want his partner to find him, so his last memory was wandering onto the street. He was found by a passer-by, who phoned 999 and arranged for an ambulance. He was brought to ED having been found unconscious by the paramedics and was treated in ICU.

Mr Booker states there were a number of triggers for the overdose, namely a feeling of hopelessness and frustration with how his life has turned out since he had to drop out of university last year. He had a recent relationship breakup but is still living with his ex-partner and 1 year old child.

He initially was disappointed to wake up in hospital but now is more ambivalent and wonders if this is a second chance.

He has previously been diagnosed with depression by his GP and was prescribed citalopram, however, he felt it wasn't working so discontinued it himself after a few days.

Past Psychiatric History

Depression – on antidepressants from GP (Citalopram) – poor adherence

No previous suicide attempts or attempts at self harm

Never received professional input regarding alcohol use

Medical history

Age 19 – RTC x2, traumatic brain contusion

Age 20 - mesial temporal lobe epilepsy

Family history

No family history of mental illness

Developmental history

C-section delivery

Achieved all normal developmental milestones at appropriate ages

Attended Village Primary school, got on well with peers. Went to Redeemer Grammar School, was studious and didn't have a large friend group. Got three A-levels and started university in Belfast however dropped out age 21.

Social History

Unemployed – previously had a part time job in a shop while at university but was fired for poor attendance a year ago.

Lives with ex-partner and 1 year old child at present although has been trying to find alternative accommodation.

Not currently in a relationship. One previous long-term partner. Relationship ended 2 months ago. Not currently interested in a relationship.

1 year old child (lives with ex-partner)

Alcohol and drug history

Began drinking socially in university, then more regularly approx. 1 year ago -started with a few beers at the weekend, but increased over past 5 months, recently it has been 3 or 4 litres of cider per day, and a half bottle of vodka. Has tried to stop a couple of times but only able to manage 5 or 6 days before relapse. Got withdrawal shakes and sweats, no seizures.

Denies illicit drug use

Forensic history

2 RTCs

Mental State Assessment

In hospital pyjamas. Kempt, poor eye contact, looking downward. Initially difficult to form rapport but gradually opened up during assessment. Flat affect.

Speech was flat monotone, low volume.

Reports a low mood – subjectively 2/10 (was 0/10 at time of overdose)

Objectively he reports a significant loss of appetite with several stone of weight loss. He finds it hard to sleep and lacks motivation to get out of bed. Has lost interest in interacting with child and ex-partner. Used to enjoy going to rugby matches with his friends but no longer even watches them on TV.

As outlined above, took a planned overdose 3 days ago on a background of feeling hopeless about his current life circumstances and feeling that his child would be better off without him. Initially ambivalent about the future however some evidence of future planning as willing to engage with addiction services. Did not identify any protective factors. No current active suicidal ideation.

No auditory or visual perceptual disturbances. Reports negative internal thought content but no hallucinations.

No delusional thought content.

Orientated to time, place and person.

Good insight into current presentation.

Summary

Depression – suitable to restart antidepressant, counselling provided

Suicidal ideation – currently low risk

Alcohol-use disorder

Plan

Restart citalopram at 20mg OD. Mirtazepine alternative option could be considered due to beneficial side effect profile.

Community mental health team referral

Addictions team referral

Discharge Letter

Belfast Health and Social Care Trust
caring supporting improving together

Discharge Letter

DR: GP

Consultant: DR PETER TONER
Ward: ACUTE MEDICAL UNIT
H&C No: 379 405 7365
D.O.B.: Age 23

Dear DR Sherwood
Dundonald Health Centre
18 New Road
BELFAST
BT15 8JH

Re: Mr James Booker

Admission Date: 27/11/22 Discharge Date: 30/11/22
Method of Admission: EMERENCY DEPARTMENT Discharge Dest: Usual residence

Current Episode Details

Principal Diagnosis;		
Underlying Conditions & Co-morbidities:		
Principal Procedure:		**Date:** **Date:**
Other Procedure:		

Clinical Summary of Admission:

Investigations & Results:

	Test	**Appt made on**
Appt to be made		
Further Tests/ Investigations Outstanding: Yes ☐ **No** ☑		

GP SUMMARY LETTER TO FOLLOW: YES ☑ NO ☐

Review Arrangements: **Yes ☐ No ☑** **Clinic/Cons. Appt Made for**

Action Required by GP: Yes ☑ No ☐	**Details (if yes) Please repeat U&Es in 2/52 to recheck Na+ level**

Follow-up Referral to:

Information, Results about Diagnosis: Patient: Yes ☑ No ☐ Relative: Yes ☐ No ☑

Any Known Allergies: Yes ☐ No ☑ (if yes please detail in comments section)

Drugs on Discharge (Note all drugs irrespective of whether supply being made)

Drug Name and Strength	Route of Administration	Dose	Frequency	Length of Course	No. of Days Supply	Pharmacy Use Only
CITALOPRAM	PO	20MG	MANE	NEW	7	
KEPPRA	PO	500MG	BD	ONGOING	-	

Comment (include allergy, changes to medication, monitoring):
Commenced citalopram as per psychiatry

No Change From Admission Meds: ☐

Patient Moving to Discharge Lounge: Yes ☐ No ☑

DR SUSAN TODD
For Consultant DR P TONER

Bleep: 7689

Date: 30/11/22
Grade: FY1

Pharmacy Authorization
Clinical Check by: M FERRY
Labelled by: J WHITE
Dispensed by: F DOYLE
Checked by: N ROBERTS

Completed By:
(if not originating Doctor)

Signature: ___Susan Todd_____ **Print Name:_SUSAN TODD____**

Registration Number:_____789999_____

Date of completion: 30/11/22

Community Follow-up

Mr Booker's GP, Dr Sherwood, receives his hospital discharge letter. She rings Mr Booker and asks him to come in for face to face review the next day.

GP EMIS web entry

01.12.22 14.30

Recent HDU admission – planned OD with significant risk- discharged under crisis team- awaiting CPN allocation. Child protection processes commenced by ED. o/e tearful – regrets OD- states recently broke up with partner and this was 'final straw'. Appears low mood today, sleep and concentration poor, denies street drugs. Adhering to citalopram 20mg mane prescribed in hospital. Asking for 'MOT' as feeling physically unwell, TATT, low energy. Bloods from hospital adm reviewed – FBP normal range.

Impression – high risk OD, some evidence of depression, no TSH today. Safeguarding issues present.

Plan

- Explanation re delay for SSRI to take effect
- Signposted to online sources for support for low mood
- Daily dispense- rv 1 month
- Agreed check U&Es, TFTs, HbA1c in 2 weeks before next appt
- Updated on Gateway safeguarding processes– upset but accepted same
- Declined community addictions input at present- aware can be done at any time
- Options for social prescribing discussed
- Safety plan discussed- rv here/ ooh/ hospital any time if concerns

Acute prescriptions

01/12/22 Promethazine 25mg nocte as needed – short term use only ISSUE 14 TABS DISPENSE DAILY

Repeat prescriptions

01.12.22 Citalopram 20mg mane ISSUE 28 TABS DISPENSE DAILY

01.12.22 Levetiracetam 500mg bd ISSUE 28 TABS DISPENSE DAILY

24.02.21 Levetiracetam 500mg bd ISSUE 28 TABS

Problem list

G40 Epilepsy and recurrent seizures

F10.2 Alcohol dependence

X61 Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified

F41.2 Mixed anxiety and depressive disorder

XaAey Referral to Social Services

ADDITIONAL FACILITATOR MATERIALS

Blood work

379 405 7365 BOOKER James (Male/22 years)

Electrolyte Profile

Number	1	Ref. Range (Units)
Collected	14-Dec 2022 08:45	
Signed		
Source	BHSCT	
Sodium	*128	136-145 (mmol/L)
Potassium	4.4	3.5-5.3 (mmol/L)
Chloride	*93	95-108 (mmol/L)
CO2	25	22-29 (mmol/L)
Urea	7.2	2.5-7.8 (mmol/L)
Creatinine	80	45-84 (µmol/L)
eGFR	>60	<60 (mL/min/1.73m^2)

* Denotes abnormal result

Thyroid function tests

Number	1	Ref. Range (Units)
Collected	14-Dec 2022 08:45	
Signed		
Source	SEHSCT	
TSH	2.8	0.3 - 4.2 (mU/L)
fT4	18	9 - 25 (pmol/L)

B12 and folate

Number	1	Ref. Range (Units)
Collected	14-Dec 2022 08:45	
Signed		
Source	SEHSCT	
Serum vitamin B12	268	160 – 925 (ng/L)
Serum folate	3.2	3 – 15 (µg/L)

HbA1c

Number	1	Ref. Range (Units)
Collected	14-Dec 2022 08:45	
Signed		
Source	SEHSCT	
HbA1c	38	20 - 42 (mmol/mol)

Further investigations

Dr Sherwood speaks to Mr Booker, who is feeling physically fine. She requests some more tests:

379 405 7365 BOOKER James (Male/22 years)

Electrolyte Profile

Number	1	Ref. Range (Units)
Collected	16-Dec 2022 08:30	
Signed		
Source	BHSCT	
Sodium	*128	136-145 (mmol/L)
Potassium	4.4	3.5-5.3 (mmol/L)
Chloride	*93	95-108 (mmol/L)
CO2	25	22-29 (mmol/L)
Urea	7.2	2.5-7.8 (mmol/L)
Creatinine	80	45-84 (µmol/L)
eGFR	>60	<60 (mL/min/1.73m^2)

* Denotes abnormal result

Serum Osmolality

Number	1	Ref. Range (Units)
Collected	16-Dec 2022 08:30	
Signed		
Source	BHSCT	
Serum Osmolality	270	275-295 (mOsmol/kg)

Urine Osmolality

Number	1	Ref. Range (Units)
Collected	16-Dec 2022 08:30	
Signed		
Source	BHSCT	
Urine Osmolality	285	(mOsmol/kg)

Urinary Sodium

Number	1	Ref. Range (Units)
Collected	16-Dec 2022 08:30	
Signed		
Source	BHSCT	
Urinary Sodium	35	(mmol/L)

Summary

Dr Sherwood decides to manage this by cross-tapering citalopram to mirtazapine. She arranges appropriate management and monitoring of blood results. James engages with the community mental health team and social services. Primary and secondary care services are both involved in his long-term follow-up.