Patient Profile

Patient background and medication list

Reason for selecting profile

Interesting depression case whereby there were several opportunities for intervention as a pharmacist to ensure drug-related problems were managed as well as referral to the appropriate teams for their input. Good learning opportunity.

Patient's details

Initials: IF	*Age: 40*	*Gender: Male*
Weight: 139.7kg	*Height: 510 metres*	*BMI: >47*

Patient history

Presenting complaint: Nausea, palpitations and cough with white/brown sputum for past week. Unable to concentrate and 'feeling rough'. Very anxious and agitated. Tachycardia. Patient experiencing suicidal ideation.

Past Medical History: Depression, COPD, Type 2 diabetes, Hypertension, Personality disorder.

Social History: Lives alone in flat. Independent. Has smoked about 20 cigarettes per day for over 20 years. No alcohol.

Impression/Diagnosis: Possible adverse reaction to quetiapine. Lower respiratory tract infection (LRTI). Agranulocytosis.

Plan: Liaise with psychiatry team to review medicines, treat LRTI with doxycycline, monitor bowels, ECG.

Patient history	
Medication list	
Treatment	*Indication and evidence*
COPD rescue pack PRN	COPD
Lisinopril tablets 5mg OM	Hypertension
Omeprazole EC capsules 20mg OM	Proton pump inhibitor (PPI) given steroid use
Prednisolone tablets (reducing course): 40mg OM for 7 days, then 30mg OM for 2 weeks then reduce by 5mg every 2 weeks then stop	COPD exacerbation (started 1 week ago, therefore to start at 30mg daily on admission to hospital)
Quetiapine tablets 25mg BD	Treatment of depression in borderline personality disorder[1]
Salbutamol 100 microgram MDI 2 puffs PRN	COPD
Salbutamol 2.5mg/2.5ml nebuliser solution 2.5mg PRN	COPD
Tiotropium 2.5 microgram MDI 2 puffs OM	COPD maintenance therapy as per BNF and NICE guidelines[2]
Venlafaxine MR capsules 75mg OM	Major depression[3]. According to NICE guidelines CG90, this patient fits into step 3 of the stepped-care model since is on combined treatment with ineffective response to initial interventions and requires follow-up for further assessment[4]
Drug sensitivities: NKDA	

Medication changes					
Treatment	*Route*	*Dose & frequency*	*Indication*	*Start date*	*Stop date*
Lisinopril tablets	PO	5mg OM	Hypertension	On admission	9/12/15
Lisinopril tablets	PO	10mg OM	Hypertension – dose increased following intervention (see drug-related problem/progress notes)	10/12/15	-
Omeprazole EC capsules	PO	20mg OM	Proton pump inhibitor (PPI) given steroid use	On admission	-
Prednisolone tablets	PO	30mg OM for 2 weeks then reducing as above	COPD exacerbation	On admission	On admission
Prednisolone tablets	PO	30mg OM for 2 days then reduce by 5mg every 3 days then to stop	COPD exacerbation – this was prescribed incorrectly (see drug-related problem/progress notes)	8/12/15	9/12/15
Prednisolone tablets	PO	30mg OM for 2 weeks then reducing as above	COPD exacerbation – doses were altered to established treatment dose after my intervention	10/12/15	-
Quetiapine tablets	PO	25mg BD	Depression in borderline personality disorder	On admission	On admission
Salbutamol MDI	IH	2 puffs PRN	COPD	On admission	-
Salbutamol nebuliser	IH	2.5mg PRN	COPD – not prescribed on admission due to tachycardia and chest ‘not too bad’ as per patient. Continued on discharge.	On admission	On admission

Medication changes					
Treatment	*Route*	*Dose & frequency*	*Indication*	*Start date*	*Stop date*
Tiotropium MDI	IH	2 puffs OM	COPD maintenance therapy	On admission	-
Venlafaxine MR capsules	PO	75mg OM	Major depression	On admission	10/12/15
Venlafaxine tablets	PO	37.5mg OM for 2weeks	Major depression – dose reduced as per psychiatry review (see progress notes)	10/12/15	-
Cyclizine tablets	PO/IV	50mg PRN (max 150mg daily)	Nausea	9/12/15	11/12/15
Doxycycline capsules	PO	100mg OM for 4 days	LRTI	9/12/15	12/12/15
Paracetamol tablets	PO	1g PO PRN	Pain relief if required	9/12/15	11/12/15
Diazepam tablets	PO	5mg BD for 2 weeks	As recommended by psychiatrist for anxiety. Benzodiazepines are indicated for short-term relief for up to 4 weeks as per BNF[5]	10/12/15	24/12/15

Monitoring plan

Monitoring plan and outcomes			
Parameter	*Justification*	*Frequency*	*Result/s or plan*
Blood pressure (normal 120/80)	Important to monitor as patient presented with hypertension on admission. Patient is on venlafaxine which should be used with caution in hypertension and contraindicated in uncontrolled hypertension.	On admission then 2 hourly till BP within normal range	8/12/15 – 182/103, 199/119 9/12/15 – 175/123, 158/75 10/12/15 – 162/86
Temperature (normal 37.5)	Infection marker	Daily if in range and more often if raised	8/12/15 – 35.9 9/12/15 – 35.6
White cell count (normal 3.7-11 x 10^9/L)	Infection marker		8/12/15 – 21.2 9/12/15 – 13.3
Neutrophils (1.7-7.5 x 10^9/L)	Infection marker		8/12/15 – 16 9/12/15 – 7.8
eGFR (eGFR>60ml/min)	Determines renal function – important to monitor to determine if the doses of medications are appropriate		8/12/15 - >60 9/12/15 - >60
Sodium (133-146mmol/L)			8/12/15 – 139 9/12/15 – 140
Potassium (normal 3.5-5.3mmol/L)			8/12/15 – 4.0 9/12/15 – 3.9
Heart rate (60-100bpm)			8/12/15 – 122 (regular) 9/12/15 – 113 (regular) 10/12/15 – 78
Respiratory rate (12-16 breaths/min)			8/12/15 – 19 9/12/15 - 18
GCS (0-15 scale)			8/12/15 – 15/15 9/12/15 – 15/15

Analysis of Drug Related Problems			
Drug related problem	*Assessment*	*Priority (high / medium /low)*	*Action taken/outcome*
VTE risk assessment needs to be completed and prophylaxis prescribed if appropriate	Important that all patients have a risk assessment completed on admission to determine if prophylaxis is required based on mobility, thrombosis risk and bleeding risk.	High	Patient admitted to hospital not long ago so documented in patients notes to ensure risk assessment gets completed. Weight documented is 139.7kg so based on this twice daily dosing of enoxaparin would be appropriate (as for all patients >100kg). Risk assessment completed and no thromboprophylaxis was required as patient was not expected to have ongoing reduced mobility relative to normal state.
Symptoms patient experiencing may be due to Trazadone withdrawal	BNF states that influenza-like symptoms can occur with tricyclic and related antidepressant withdrawal, therefore should be withdrawn slowly[3].	Medium	Documented in notes that symptoms patient presented with may be indicative of Trazadone withdrawal symptoms. Await psychiatry review.
Venlafaxine is cautioned in hypertension and should be avoided in uncontrolled hypertension	Patient's blood pressure was high (182/103) on admission	High	Documented in the patients notes so that the multidisciplinary team were aware that blood pressure should be monitored closely due to hypertension and patient being on venlafaxine. Note was acknowledged by doctor review later that day. Await psychiatry review.
High blood pressure therefore may be appropriate to increase antihypertensives Your ID number here	On admission patient was on Lisinopril 5mg daily for hypertension. According to observations in hospital, it appears that his blood pressure has not been well controlled therefore may need dose increasing accordingly.		Documented in notes the importance of monitoring blood pressure (as above) and the need to get medicines reviewed by psychiatric team. I also queried the need to increase Lisinopril dose or step up therapy to ensure blood pressure is reduced and stays within normal range.

Progress notes and drug related problems

Drug related problem	*Assessment*	*Priority (high / medium /low)*	*Action taken/outcome*
Patient is a smoker	Important that smoking cessation is offered to this patient for his overall health but especially as this is an important management approach for COPD patients as stated in the NICE guidelines[2]	Medium	Notes stated that patient had been offered smoking cessation advice but patient had not expressed any willingness to give this a go.
Patient has been on back-to-back course of steroids since mid November	Upon taking the drug history, found out patient on prednisolone 30mg daily for 2 more days, to be reduced by 5mg every 3 days then to stop. However patient has been on back-to-back steroid courses since mid-November.	Medium	Note left for doctor's to review. GP surgery contacted as to why prescribed – patient felt not getting on top of symptoms so steroid started. For COPD review.
Frequent COPD exacerbations therefore need to review inhaler technique		Medium	Patient seems to use inhalers as directed and reported no compliance issues, however needs respiratory review to possible increase inhaler doses to reduce frequency of exacerbations of COPD

Progress notes	
Date	*Notes*
9/12/15	Quetiapine stopped pending psychiatry review. Patient experiencing tachycardia, nausea, vomiting, sweating since commencing on Sunday.
10/12/15	Psychiatry review: they advised the following: -Stop quetiapine and start venlafaxine 37.5mg daily for 2 weeks – patient will be reviewed in clinic with consultant psychiatrist -Diazepam 5mg BD for 2 weeks -Review in clinic in 2-3 weeks – aware of caution with hypertension -Presume any causes have been ruled out for acute onset of nausea and vomiting -Overnight observation due to mother's concern and patient increasingly anxious, not eating well and mother wanted to speak to consultant.

Discharge / ongoing planning and follow up

Discharge / ongoing plan and follow up	
Discharge requirement	*Action taken / forward communication*
Discharge prescription forwarded to GP and copy for patient	
Outpatient cardiology review	
Follow-up with psychiatrist in 2 weeks from discharge.	

Continuing Professional Development

Learning plan and record	
Learning need identified	*Action taken*
I want to learn/revise about other cautions/contraindications for drugs used in depression	This is an outstanding learning need which I have identified from doing this patient profile. I will use the BNF and refer to NICE guidelines to carry out this learning

Assessment							
A. Patient background and med list	*B. Progress notes and medication changes*	*C. Monitoring plan*	*D. Identific-ation of DRPs*	*E. Action plan*	*F. Evidence for drug usage*	*G. Discharge planning and follow up*	*H. CPD*
/5	/5	/5	/5	/5	/5	/5	/5
Total / 25							
First assessor's signature and comments							
A. Patient background and med list	*B. Progress notes and medication changes*	*C. Monitoring plan*	*D. Identific-ation of DRPs*	*E. Action plan*	*F. Evidence for drug usage*	*G. Discharge planning and follow up*	*H. CPD*
/5	/5	/5	/5	/5	/5	/5	/5
Total / 25							
Second assessor's signature and comments							

Agreed mark / 40……

References

1. British National Formulary – September 2015. Chapter 4 – Central Nervous System: Antipsychotic drugs – Quetiapine. Accessed online 15/12/2015.

2. NICE guidelines [CG101]. June 2010. Chronic obstructive pulmonary disease in over 16s: diagnosis and management. URL: http://www.nice.org.uk/guidance/cg101/chapter/Key-priorities-for-implementation Accessed online 15/12/2015.

3. British National Formulary – September 2015. Chapter 4 – Central Nervous System: Other antidepressant drugs – Venlafaxine; Trazodone. Accessed online 15/12/2015.

4. Nice Guidelines [CG90]. October 2009. Depression in adults: recognition and management. URL: https://www.nice.org.uk/guidance/CG90 Accessed 18/12/2015.

5. British National Formulary – September 2015. Chapter 4 – Hypnotics and anxiolytics. Accessed online 15/12/2015.