The monitoring and treatment of clozapine-induced constipation within Leicestershire Partnership NHS Trust (LPT) Rehabilitation Services

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Background

Constipation associated with clozapine use is very common, with one meta-analysis finding a prevalence of 31.2% among adults taking clozapine[1]. The incidence of constipation appears positively correlated with clozapine dose[2] and treatment duration, where courses of clozapine continuing for more than 6 months has been associated with constipation in up to 80% of individuals[3]. Co-prescription of clozapine with other medications known to cause constipation as a side effect, including anticholinergics and antipsychotics, appears to further increase the risk of constipation and associated complications compared to clozapine alone[3]. The rate of reported constipation is also higher among inpatient (40.5%) than outpatient (26.2%) populations on clozapine[1]. Some research suggests rates of constipation are even higher among psychiatric rehabilitation inpatients who have extended hospital admissions of at least one year[4].

Within Leicestershire Partnership NHS Trust (LPT), local guidance states the importance of monitoring for constipation in patients taking clozapine but does not suggest what this should entail. Thus, there is a possibility for a discrepancy in the quality of constipation monitoring among patients on clozapine within LPT. Maudsley guidelines provide detailed recommendations on this which includes frequent use of bowel monitoring charts.

Considering the high prevalence of clozapine-induced constipation, and the potentially life-threatening sequelae if constipation goes unidentified or untreated, it is vital that comprehensive monitoring and effective management is performed. Patients under the care of rehabilitation psychiatry services often experience extended inpatient admissions or may suffer from severe mental illness requiring extended treatment with clozapine, making this patient group susceptible to clozapine-induced constipation.

Aims and hypothesis

This study aims to investigate, primarily, whether healthcare staff working in psychiatric rehabilitation services within LPT are following local LPT guidance for the monitoring and treatment of constipation in patients on clozapine, and secondly, how effectively this incorporates Maudsley guidance for the monitoring of constipation. We also aim to uncover the type, frequency, and effectiveness of the laxatives prescribed as treatment for clozapine-induced constipation among LPT psychiatric rehabilitation patients and whether this correlates to local trust guidance.

Methods

We collected data regarding constipation monitoring and treatment for patients taking clozapine under the care of LPT rehabilitation services, through searching patient records and prescription history, with no direct patient or patient relative contact. Records were reviewed from the date when patients transferred to the care of rehabilitation services up to and including 01/06/2023. Questions aimed to assess our effectiveness at following local LPT trust guidelines for constipation monitoring and treatment in patients on clozapine.

Results

There were 16 eligible participants for our study. 75% of participants in the sample were on concurrent medications with well-known associations with constipation. 5/16 (31%) of patients reported constipation during their treatment course with clozapine. 63% (10/16) of patients on clozapine were prescribed laxatives. No bowel chart monitoring had been documented as completed in any of our patients. 11/16 (68.8%) patients had been discharged from inpatient services with follow-up under the community enhanced rehabilitation team. Only 4/11 (36.4%) of these patients were documented to have been asked about their bowel habits at follow-up appointments in the community.

Question	Choice	Results (%)
Were any of these medications prescribed concurrently with clozapine?	Non-clozapine antipsychotic	10/16 (62.5%)
	Tricyclic antidepressant	1/16 (6.3%)
	Procyclidine	4/16 (25%)
	Antimuscarinic (e.g. Hyoscine or pirenzepine)	4/16 (25%)
	None of the above	4/16 (25%)
Was bowel habit monitoring via LPT bowel-chart commenced or continued during the patient's inpatient stay?	Commenced	0/16
	Continued	0/16
	No bowel monitoring occurred	16/16 (100%)
During treatment with clozapine, did the patient report constipation?	Yes	5/16 (31.3%)
	No	11/16 (68.8%)
Were laxatives prescribed?	Yes	10/16 (62.5%)
	No	6/16 (37.5%)
Which laxatives were prescribed?	Macrogol	7/10 (70%)
	Lactulose	2/10 (20%)
	Senna	6/10 (60%)
	Docusate	0/10
	Other	2/10 (20%)
Has the patient been discharged from rehab inpatients? i.e: the patient is no longer a patient on the ward?	Yes	11/16 (68.8%)
	No	5/16 (31.3%)
Have the patient's bowel habits been assessed during outpatient follow-up appointments?	Yes	4/11 (36.4%)
	No	7/11 (63.6%)

Conclusions

Promoting awareness amongst our inpatient and outpatient rehabilitation staff regarding the importance of monitoring for clozapine-induced constipation should be a priority. If LPT incorporates bowel chart monitoring recommendations from Maudsley into their guidelines, we may see an improvement in utilization of bowel charts and constipation monitoring for patients on clozapine, which may help prevent the development of life-threatening complications.

References

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