CLINICAL AUDIT

Prescribing **citalopram** safely

Valid to April 2020

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better medicine

Audit Focus

This audit was initially developed in 2012 due to a change in the recommendations for the maximum doses for citalopram, a selective serotonin reuptake inhibitor (SSRI). The audit is still relevant to all practices in New Zealand for any patient currently being treated with citalopram, as no conclusive evidence has since emerged that these recommendations should be changed.

The objective of this audit is to ensure that all patients currently taking citalopram for the medical management of depression (or other mental health disorders) do not exceed the recommended safe dose. Reviewing the doses in patients taking citalopram is a good way to ensure that the maximum limit is not being exceeded.

Background

In 2012 there was a change in prescribing recommendations for citalopram dosing. The maximum daily dose for citalopram is now 40 mg in people with no other risk factors, and 20 mg in people aged >65 years. The change was based on research that showed that higher doses of citalopram can result in QT-prolongation and Torsades de Pointes. Clinical studies have also shown that 60 mg/day of citalopram is no more effective than 40 mg/day.

At the request of the Medicines Adverse Reactions Committee (MARC), a warning was added to all SSRI, tricyclic antidepressant and venlafaxine data sheets regarding the risk of QT prolongation and Torsades de Pointes in patients receiving these medicines.

As the adverse effects of citalopram at higher doses have the potential to cause long-term harm and even fatalities is it very important that all health professionals are aware of the dosing requirements and the full range of possible adverse effects and contraindications. Patients currently prescribed citalopram at higher than the recommended maximum dose should have their dose titrated down to the correct level or be switched to a different medicine. There may be some instances where this is not appropriate. In these cases, vigilant monitoring for adverse effects and regular ECG monitoring is required.

It is important to communicate the risks associated with citalopram to patients, as well as counseling patients through any necessary changes.

 For further information see: "Prescribing citalopram safely: an update", BPJ 42 (Jan, 2012).

Recommendation

It is recommended that prescribers identify eligible patients (i.e. those exceeding the recommended maximum dose) and adjust doses of citalopram to reflect current dosing recommendations:

Maximum daily dose	Patient group
40 mg	People 18 – 65 years
20 mg	People > 65 years
	People with impaired hepatic function
	People who are poor CYP2C19 metabolisers or those taking a CYP2C19 inhibitor such as omeprazole or cimetidine

Note that citalopram is **contraindicated** in people with congenital long QT syndrome, in people in a manic phase of bipolar disorder and in those concurrently using a monoamine oxidase inhibitor or pimozide.

Citalopram should be used with caution in people with risk factors for QT prolongation (e.g. structural heart disease, bradycardia, hypokalaemia, hypomagnesaemia or hypocalcaemia), people taking other medicines that can affect the QT interval (e.g. lithium, sotalol) and people with severely reduced renal function (creatinine clearance <20 mL/minute).

Audit outline

The recommended steps for completing the audit are:

1. All patients currently taking citalopram should be identified
2. Patients taking doses greater than those recommended should be recorded
3. Where clinically appropriate, the dose for these patients should be reduced to equal to or less than the recommended maximum or alternatively, patients should be switched to another medicine

Best practice action plan

Any patient currently being treated with citalopram should have the following recorded in their notes:

- The daily dose they are taking

And

- Any factors or contraindications affecting the dose, e.g. hepatic impairment
- Any risk factors for QT-prolongation, such as congenital QT disorder or bradycardia
- The presence and severity of any adverse affects to citalopram

And if the dose exceeds the maximum

- A note to correct the dose at the next patient consultation or switch to an alternative medicine, or that the patient has been contacted to discuss the change

Standards

Consider what percentage of patients taking greater-than-recommended doses of citalopram might be expected to be identified and require a dose reduction or a switch to a new medicine.

Ideally 100% of patients aged 18 – 65 years taking citalopram at doses greater than 40 mg/day and patients aged > 65 years taking citalopram at doses greater than 20 mg/day should be identified.

There may be some cases in which a change to the dosing regimen is not appropriate, however, a target for dose reduction or medicine switch of close to 100% should ideally be aimed for.

Data for completing the audit

Identifying patients

You will need to have a system for identifying patients currently taking citalopram.

Most practices will be able to identify patients by running a query through their patient management system (PMS) for people who have been prescribed citalopram during the last four months.

Examining consultation notes may be helpful in identifying patients with hepatic impairment and other risk factors, however, this method may be limited.

Sample size

The number of eligible patients will vary from practice to practice. Ideally sample size should be "all patients taking citalopram", however, this may be too large in some practices, therefore the first 20 results returned from a search can be used as a sample.

Data analysis

Use the data sheet provided to record your sample.

Compare the percentages achieved to the standards set previously. The initial percentage of patients switched to recommended doses or another medicine will vary from practice to practice and among practitioners and discussing these with your peers may be useful in establishing treatment goals.

Identifying opportunities for CQI

Taking action

The first step to improving medical practice is to identify where gaps exist between expected and actual performance and then to decide how to change practice.

Decide on a set of priorities for change and develop an action plan to implement any changes.

It may be useful to consider the following points when developing a plan for action.

Problem solving process

- What is the problem or underlying problem(s)?
- Change it to an aim
- What are the solutions or options?
- What are the barriers?
- How can you overcome them?

Overcoming barriers to promote change

- What is achievable – find out what the external pressures on the practice are and discuss ways of dealing with them in the practice setting
- Identify the barriers
- Develop a priority list
- Choose one or two achievable goals

Effective interventions

- No single strategy or intervention is more effective than another, and sometimes a variety of methods are needed to bring about lasting change
- Interventions should be directed at existing barriers or problems, knowledge, skills and attitudes, as well as performance and behaviour

Review

Monitoring change and progress

It is important to review the action plan at regular intervals. It may be helpful to review the following questions:

- Is the process working?
- Are the goals for improvement being achieved?
- Are the goals still appropriate?
- Do you need to develop new tools to achieve the goals you have set?

Following the completion of the first cycle, it is recommended that practitioners complete the first part of the CQI activity summary sheet (Appendix 1).

Undertaking a second cycle

In addition to regular reviews of progress, a second audit cycle should be completed in order to quantify progress on closing the gaps in performance.

It is recommended that the second cycle be completed within 12 months of completing the first cycle. The second cycle should begin at the data collection stage. Following the completion of the second cycle it is recommended that practitioners complete the remainder of the CQI activity summary sheet.

The Royal New Zealand College of General Practitioners

Claiming MOPS credits

This audit has been endorsed by the RNZCGP as a CQI Activity for allocation of MOPS credits. General practitioners taking part in this audit can claim credits in accordance with the current MOPS programme. This status will remain in place until **April, 2020**.

To claim points go to the RNZCGP website:
www.rnzcgp.org.nz

Record your completion of the audit on the **MOPS Online credit summary**, under the **Continuous Quality Improvement/Audit of Medical Practice** section. From the drop down menu, select the audit from the list or select "Approved practice/PHO audit" and record the name in the notes. 'MOPS online' can be completed by vocationally registered doctors or 'CPD online' for general registrants. Alternatively MOPS participants can indicate completion of the audit on the annual credit summary sheet which is available from the College on request.

As the RNZCGP frequently audit claims you should retain the following documentation, in order to provide adequate evidence of participation in this audit:

1. A summary of the data collected
2. A Continuous Quality Improvement (CQI) Activity summary sheet (included as Appendix 1).

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Data sheet – cycle 1 Prescribing citalopram safely

	Dose is above recommended maximum (40 mg/day or 20 mg/day with risk factors)	A note has been made to correct the dose at the next patient consultation or switch to an alternative medicine, or that the patient has been contacted to discuss the change
	YES/NO	**YES/NO**
1		
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16		
17		
18		
19		
20		
Total YES		
% YES		

Please retain this sheet for your records to provide evidence of participation in this audit.

Data sheet – cycle 2 Prescribing citalopram safely

	Dose is above recommended maximum (40 mg/day or 20 mg/day with risk factors)	A note has been made to correct the dose at the next patient consultation or switch to an alternative medicine, or that the patient has been contacted to discuss the change
	YES/NO	**YES/NO**
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Total YES		
% YES		

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APPENDIX 1

Audit of Medical Practice (CQI activity) Summary Sheet

Topic:	**Prescribing citalopram safely**
The activity was designed by (name of organisation if relevant):	**Bpac^{nz}**
Doctors Name:	

FIRST CYCLE

DATA:	Date of data collection:

CHECK:	Describe any areas targeted for improvement as a result of analysing the data collected.

ACTION:	Describe how these improvements will be implemented.

MONITOR:	Describe how well the process is working. When will you undertake a second cycle?

Please retain this sheet for your records to provide evidence of participation in this audit.

SECOND CYCLE

DATA:	Date of data collection:

CHECK:	Describe any areas targeted for improvement as a result of analysing the data collected.

ACTION:	Describe how these improvements will be implemented.

MONITOR:	Describe how well the process is working.

COMMENTS:	

Please retain this sheet for your records to provide evidence of participation in this audit.