Safer lithium therapy

**Issue**

Some patients taking lithium have been harmed because they have not had their dosage adjusted based on recommended regular blood tests. If patients are not informed of the known side effects or symptoms of toxicity, they cannot manage their therapy safely.

Regular blood tests are important. Clinically significant alterations in lithium blood levels occur with commonly prescribed and over-the-counter medicines. The blood level of lithium is dependent on kidney function and lithium has the potential to interfere with kidney (renal) and thyroid functions.

**Patient safety incidents**

The National Patient Safety Agency (NPSA) received 567 incident reports (October 2003 to December 2008) relating to lithium use. Two reports were of severe harm, 34 moderate and 531 low or no harm. The most common error was ‘wrong or unclear dose or strength’ (124 incidents).

The NHS Litigation Authority dealt with two fatal and 12 severe harm incidents involving lithium therapy and the Medical Defence Union has been involved with 15 incidents directly related to lithium toxicity and monitoring.

An audit found that only 42 per cent of patients on initiation of lithium therapy were documented to have been informed of risk factors for toxicity. For patients maintained on lithium therapy in the previous year, the audit found:

- one in 10 patients had no documented lithium blood level. (National Institute for Health and Clinical Excellence (NICE) standard: one blood level measurement every three months. Not met for 70 per cent of patients);
- one in five patients had no renal function tests documented (NICE standard: assessment every six months. Not met for 46 per cent of patients);
- one in six patients had no thyroid function tests documented (NICE standard: assessment every six months. Not met for 51 per cent of patients).

**Supporting information**

Further information and support materials to implement this guidance are available from: [www.nrls.npsa.nhs.uk/alerts](http://www.nrls.npsa.nhs.uk/alerts)

Further information

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