AUDIT ON THE USE OF ANTIPSYCHOTIC MEDICATION IN A COMMUNITY SAMPLE OF PEOPLE WITH LEARNING DISABILITY

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Introduction

Psychotropic medications are frequently used in treating people with learning disability. Antipsychotics are the most widely prescribed psychotropic medication for people with learning disability (King, 2002).

The two main reasons for the use of antipsychotic medication in people with learning disability are to treat psychiatric disorders and to manage challenging behaviours. Recently there have been reports about the increasing use of atypical antipsychotics for people with learning disability, with risperidone and olanzapine being the most frequently prescribed (Friedlander et al., 2001).

There are a number of reasons for concern about the use of antipsychotic medication in learning disability. Their use to control challenging behaviour in the absence of mental illness is controversial and not supported by good research trials. Brylewski and Duggan (1999), in a systematic review, concluded there was no trial-based evidence that antipsychotic medication was effective for challenging behaviour. However, there is evidence from common practice that the use of antipsychotic medication in challenging behaviour is an effective form of treatment (Deb et al., 2006). The report “Valuing People” (Department of Health, 2001) expressed concern that ‘too often this medication is used as an alternative to adequate staffing’; moreover side effects of these medications are difficult to assess due to communication difficulties in some patients and at times carers are unable to recognise these side effects. Up to 34% of treated patients show signs of tardive dyskinesia (Sachdev, 1991).

High dose antipsychotics can be defined as “a total daily dose which exceeds the advisory upper limit for general use
in the BNF (British National Formulary) or product licence”. (Royal College of Psychiatrists, 1994).

The scientific evidence for the effectiveness of high-dose antipsychotics is limited and the use of these medications is associated with dangerous side effects. In very high doses, non-specific neurochemical effects can cause central nervous system depression, respiratory depression, hypoxaemia and sometimes seizure. Dose related side effects also include the extrapyramidal effects of Parkinsonism, dystonia, and akathisia. Antipsychotic drugs block the cell membrane sodium pump, which leads to a slowing of the rate of contraction of the heart. This can be self-limiting, but it can develop into fatal ventricular fibrillation (Royal College of Psychiatrists, 1994).

The practice of prescribing antipsychotic medication at North Hertfordshire has not been audited before, and it is essential to review our prescribing practice. We used the Royal College of Psychiatrists, consensus statement on the use of high dose antipsychotic medication, 1994 as standards to review our practice.

Aims of the audit

The aims of this audit were to identify:

1. the number of patients receiving antipsychotic medication.
2. the reasons for prescribing antipsychotics.
3. patients on high dose antipsychotics and to establish whether the Royal College of Psychiatrists standards for high dose antipsychotic use have been achieved.

Method

In this audit we reviewed one hundred case notes, which included patients in Stevenage and Letchworth areas in Hertfordshire covered by the Community Learning Disability Team. The audit standards are based on the Royal College of Psychiatrists Consensus statement on the use of High–Dose Antipsychotic Medication 1994. We identified patients on antipsychotic medication and reviewed the dosage of single antipsychotic and polypharmacy (including as required medication pro re nata (PRN)); the dosages were compared with British National Formulary (BNF) maximum doses. When considering the PRN medication the total possible dosage on each day was included in the calculation.

Standards

On prescribing high dose antipsychotics, the following should be clearly documented;

1. Multi-disciplinary team discussion took place regarding the prescription.
2. The rational for prescribing is documented before commencement.
3. Consent was sought, if not, reasons must be documented.
4. Baseline investigations should be made.
5. Blood pressure, pulse, and temperature should be taken weekly.
6. The initial prescription is completed by either the consultant or specialist registrar or associated specialist.
7. Review of the medication must occur at least once every three months. The review must involve a multi-disciplinary team.
## Results

The number of patients on antipsychotic medication was 43 (43%); none of these patients were on doses above the BNF maximum limits. TABLE I shows the different types of antipsychotic medication used with the dose ranges. Four patients (9%) were on two antipsychotic drugs at the same time, the combined doses were within the BNF limits.

We noticed that out of the forty three patients who were receiving antipsychotic medication, 29 patients (67%) were prescribed antipsychotics for treatment of mental disorders, and 14 patients (33%) prescribed these medications to manage behavioural symptoms (TABLE II).

### Practical implications

The use of antipsychotic medication is common in people with learning disability. Challenging behaviour is a common cause of prescribing antipsychotic medication, even in the absence of robust evidence for its necessity.

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### TABLE I

**Antipsychotic medication and the ranges of doses used**

<table>
<thead>
<tr>
<th>Antipsychotic drugs</th>
<th>Number of patients (%)</th>
<th>Range of dose given daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risperidone</td>
<td>23 (53)</td>
<td>0.5 - 4mg</td>
</tr>
<tr>
<td>Chlorpromazine (including four patients on PRN Chlorpromazine)</td>
<td>10 (23)</td>
<td>25 - 100mg</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>4 (9)</td>
<td>7.5 - 17.5mg</td>
</tr>
<tr>
<td>Stelazine</td>
<td>3 (7)</td>
<td>2 - 6mg</td>
</tr>
<tr>
<td>Flupentixol (IM)</td>
<td>3 (7)</td>
<td>40 - 80mg / 2 weekly</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>2 (4)</td>
<td>0.5 - 1mg</td>
</tr>
<tr>
<td>Amisulpride</td>
<td>2 (4)</td>
<td>200 - 250mg</td>
</tr>
<tr>
<td>Polypharmacy (two antipsychotics)</td>
<td>4 (9)</td>
<td>The ranges of doses are as above</td>
</tr>
<tr>
<td>Flupentixol (IM) &amp; Amisulpride</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Risperidone &amp; Chlorpromazine (PRN)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Olanzapine &amp; Chlorpromazine (PRN)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

% = % of the sample on antipsychotics (n = 43)

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### TABLE II

**Reasons for Prescribing**

<table>
<thead>
<tr>
<th>Reasons for prescribing antipsychotics</th>
<th>Number of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural symptoms</td>
<td>14 (33)</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>7 (16)</td>
</tr>
<tr>
<td>Bipolar affective disorder</td>
<td>3 (7)</td>
</tr>
<tr>
<td>Dementia</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Obsessive Compulsive Disorder</td>
<td>3 (7)</td>
</tr>
<tr>
<td>Autism</td>
<td>8 (19)</td>
</tr>
<tr>
<td>Depression</td>
<td>3 (7)</td>
</tr>
<tr>
<td>Schizo-affective disorder</td>
<td>4 (9)</td>
</tr>
</tbody>
</table>

% = % of the sample on antipsychotics (n = 43)
Discussion

The use of antipsychotic medication in people with learning disability is common, in our sample 43% of patients have received antipsychotic medication. One third of these patients (33%) were prescribed antipsychotics to manage behavioural symptoms without mental illness. In this audit we reviewed our prescribing practice for high dose antipsychotics. In comparison to the audit done in tertiary services (Dalvi et al., 2003), we did not find people on high doses. This may be due to the fact that our sample consisted of people who are living in the community, participating in community activities and hence a more settled group. A previous study done in a community setting (Fernando et al., 1997) also did not find anyone on high doses, and these results are thus comparable to ours. In our sample, people are monitored closely e.g. every six months at least and hence this may be another reason why no one is on high doses of antipsychotic medication.

The doses used were low. The most common drug used was risperidone, which was used in more than 50% of the patients. In our sample, 39% of those receiving risperidone received it for the treatment of behavioural symptoms associated with autism, which was the most common diagnosis (19%). Similarly a previous study found 25% of risperidone use was for behavioural disorders in Pervasive Developmental Disorders (Bokszanska et al., 2003).

Recommendations

In our current prescribing practice, the antipsychotic medication doses have been within the BNF limits. We recommend that we should continue with the current prescribing practice and repeat the audit in one-year time. The above mentioned standards should be considered when a high dose antipsychotic medication is needed. We have developed a checklist based on these standards to be available for our Community Learning Disability Team to use when a high dose antipsychotic medication is needed.

Summary

This is an audit to review the use of Antipsychotic Medication in a community sample of people with learning disability, to review our prescribing practice and improve areas where the standards are not achieved. The aim is to prescribe the minimum effective dose of a single antipsychotic medication (monotherapy). Patients must be assessed and closely monitored for response to treatment and side effects. In our sample, all patients were on small doses of antipsychotic medication and a large majority were on a monotherapy. Sixty seven percent (67%) of patients had a diagnosis of a mental illness and 33% received antipsychotic medication for the management of behavioural problems. The most commonly used antipsychotic medication was risperidone. Two thirds of patients who were on antipsychotics, received atypical antipsychotics and one third were on the older typical antipsychotic drugs.

The recommendations following the audit being that the current prescribing practice is continued when there is regular review of the patients. In addition, the use of the checklist is recommended whenever high dose antipsychotic medication is prescribed.
Check list for recommendations on the use high dose antipsychotic medication

1. Documentary evidence that Multidisciplinary Team discussion took place regarding the prescription of high dose antipsychotics. 
2. Rationale for prescribing the medication clearly documented prior to the commencement. 
3. Documentary evidence that consent was given/sought. 
4. If consent was not given or sought, reasons are documented. 
5. Baseline investigations, FBC; U&E: LFT and ECG. 
6. Investigations repeated every three months. 
7. BP, pulse and temperature are recorded weekly. 
8. The initial prescription has been completed by either a consultant, Specialist Registrar or Associated Specialist. 

References


