POMH-UK Topic 6a baseline report

Assessment of the side effects of depot antipsychotics

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Clinical background

Antipsychotic drugs provide relief for many patients from the symptoms of psychosis and are widely prescribed for the long-term treatment of schizophrenia. The therapeutic benefits of antipsychotic treatment are frequently gained at the cost of a diverse range of unpleasant, disabling, and potentially harmful side effects, which can impact virtually every physical system (Barnes & Spence 2000; Haddad & Sharma 2007). Treatment side effects can cause patients significant distress and functional impairment (Fakhoury et al. 2001; Williams & Pinfold 2006). Given that the symptoms of schizophrenia tend to emerge in early adulthood (Picchioni & Murray 2007), the side effects associated with long-term treatment can represent a continual burden rather than temporary discomfort.

Clinical Implications of Antipsychotic Side Effects

Side effects which cause significant distress or interfere with patients’ ability to take part in social or occupational activities (e.g. severe drowsiness) may prompt patients to stop taking or reduce their medication (Naber & Karow 2001; Weiden et al. 2004). Early negative experiences of antipsychotic drugs may also have an enduring influence on patients’ willingness to adhere to future treatment (Lambert et al. 2004). Poor adherence to medication is associated with an increased risk of symptom relapse and hospitalization (Weiden et al. 2004).

Adverse treatment effects can inhibit the process of recovery and have a negative impact on individuals’ sense of self-esteem. Movement disorders, for example, can mark patients out as “different” and compound the social stigma associated with a diagnosis of a severe mental illness (Cunningham Owens 1999). The clinical importance of treatment tolerability may be overlooked in practice, as studies have shown that clinicians tend to underestimate the distress caused to patients by specific side effects (Day et al. 1998; Finn et al. 1990).

For multiple reasons, including reduced access to health care and lifestyle factors, people with severe and enduring mental health problems tend to have poorer physical health and shorter life-spans than the general population (Brown et al. 1999, 2000; Goldberg et al. 2007). Antipsychotic drugs have been identified as an additional risk factor that may contribute to increased rates of physical comorbidity in schizophrenia, including diabetes, lipid disturbances, cardiovascular disease (Marder et al. 2002) and osteoporosis (Wieck & Haddad, 2003). Early identification of physical health problems can enable preventative action to be taken before they become difficult to reverse.

Assessing Antipsychotic Side Effects

Assessing the tolerability of antipsychotic treatment is a complex clinical task (Jordan et al. 2004), as some side effects can be difficult to distinguish from the primary symptoms of schizophrenia (Barnes & McPhillips 1999). Drug-induced akathisia, for example, may be misdiagnosed as anxiety secondary to psychosis or agitation. Misattribution of side-effects to clinical symptoms can lead to drug
doses being increased, thus exacerbating patients’ distress (Cunningham Owens 1999). Treatment tolerability can also vary over time in relation to an individual’s personal and social circumstances, hence the need for regular assessment (Weiden & Miller 2001).

Given the range of side effects associated with antipsychotics, several approaches are required to ensure comprehensive assessment. Evaluation should include physical health screening and examinations, as well as systematic enquiry about a patient’s subjective experience of treatment and the presence of any side effects (e.g. sexual dysfunction) that may not be detected through standard clinical checks.

Studies have demonstrated that using systematic approaches to elicit information from patients about treatment-related problems increases the number of side effects identified (Byerly et al 2006; Jordan, Tunnicliffe, & Sykes 2002; Weiden & Miller 2001; Yusufi et al 2007). Simply asking patients general questions about treatment tolerability is unlikely to reveal the full range of problems that they may be experiencing. Patients may not spontaneously report side effects if they do not attribute them to their medication. Studies of both patients prescribed antipsychotic drugs and general population samples indicate that many people are unclear about the potential adverse effects associated with their prescribed medication (Dernovsek et al 2000; Papanikolaou & Ioannidis 2003). Patients may feel too embarrassed to raise side effects of an intimate nature with clinicians, or they may have difficulty communicating their needs in clinical consultations (Llewellyn-Jones et al 2001).

A number of side effect rating scales and assessment tools have been developed to assist clinicians to identify treatment-related problems. The measures available vary in the range of side effects that they cover and the relative importance that they attribute to the frequency and intensity of symptoms, functional disability and patient distress (Weiden & Miller 2001). The majority of the standardised assessment tools that are available were primarily designed for research purposes and many are too time-consuming or narrow in range to be of practical use in routine clinical settings (Cunningham Owens 1999; Jordan et al 2004). Most were also developed before the widespread use of second-generation (“atypical”) antipsychotics, which have different side effect profiles to many of the older drugs (Barnes & McPhillips 1999).

**Clinical Practice Recommendations**

The NICE guideline for the treatment of schizophrenia recommends that clinicians assess antipsychotic side effects "on an ongoing basis" and proactively involve patients in decisions regarding their medication options (National Collaborating Centre for Mental Health 2003). Despite this recommendation, there is currently no explicit minimum assessment standard in terms of frequency and scope for patients receiving antipsychotic treatment in England and Wales, other than obligatory haematological monitoring for clozapine-treated patients (Taylor et al 2005).

In 2001, the former Clinical Standards Board for Scotland, (now part of NHS Quality Improvement Scotland), developed eleven clinical standards for the treatment of schizophrenia, each with specific, measurable criteria (Clinical
Standards Board for Scotland 2001). Some criteria are deemed to be essential, while others, referred to as “desirable”, are more aspirational. One of the essential criteria for the standard “Prescribing Antipsychotic Drugs – General Principles” is that the need for medication and any side effects should be monitored regularly, with an annual review by a consultant psychiatrist. At the time of each review, any side effects identified should be recorded with a description of plans for management. A desirable standard is that side effects should be assessed using standardised methods and validated rating scales.

**Side Effect Assessment in Routine Clinical Practice**

A significant proportion of the contact that patients with schizophrenia have with clinicians is based around prescribing and administering medication (Dernovsek et al 2000), which should provide opportunities for assessing treatment tolerability. There is limited evidence regarding the extent to which antipsychotic side effects are monitored in routine clinical practice, but the available studies indicate a need for improvement in this aspect of care. Weiden et al (1987) compared clinicians' recognition of extrapyramidal syndromes with independent standardised assessments made by clinical researchers. A high proportion of extrapyramidal syndromes, particularly tardive dyskinesia, were undetected during routine clinical care.

An observational study examining standards of nursing care during depot appointments found that side effects were rarely assessed; abnormal oral movements were only assessed in 36 (17%) of the 202 appointments observed and tremor in 43 (20%) (Turner 1993). All of the oral movement assessments were conducted in settings where nurses were required to record the outcomes of examinations on a computerised pro-forma. A questionnaire-based study examining community psychiatric nursing practice revealed that most nurses were only monitoring an average of three to four side-effects, which were not assessed systematically (Bennett et al 1995). Nurses who participated in a small qualitative research project exploring their knowledge of antipsychotic medication reported that they tended to monitor side effects informally through observation and questioning, even though many treatment emergent problems, particularly those associated with many of the new drugs (i.e. weight gain, metabolic abnormalities), require physical health checks (Jordan et al 1999). The POMH-UK topic 2 baseline audit (Screening for metabolic side effects of antipsychotic drugs in patients treated by assertive outreach teams) clearly demonstrated the need for improved physical health screening in patients with schizophrenia (Barnes et al 2007).