

Baseline Audit of Metabolic Screening Practices for Patients Prescribed Second Generation Antipsychotics at Low Secure Forensic Women's Services, Leeds

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Introduction or background

As part of our clinical practice, we have had an objective awareness of steadily increasing BMIs in patients prescribed second generation antipsychotics. There are additional concerns regarding the association of raised BMIs to secondary metabolic complications including diabetes mellitus, hypertension and lipid derangements. This led to a scrutiny of our current practice to adequately screen for metabolic syndrome, ensuring timely interventions are put in place. A systemic review and meta-analysis of screening practices (2012)¹ indicates that this challenge is not solely limited to our service but is part of a much wider concern.

Aims & Objectives

Aims:

To review our current screening practice for the detection of metabolic syndrome for patients prescribed second generation antipsychotics.

Objectives:

- 1) To identify patients fulfilling the criteria for metabolic syndrome.
- 2) Assessing feasibility of International Diabetes Federation criteria (2006)² and The Maudsley Prescribing Guidelines (2012)³ in adequately screening for metabolic syndrome (identified as standards).

Method – This was an audit looking at retrospective data obtained from admissions that had second generation antipsychotics commenced on admission, with subsequent monitoring over a period of at least 1 year. The last 50 admissions were reviewed prior to 4th March 2015 and 11 patients were identified. An electronic proforma was developed reflecting the IDF criteria and recommended Maudsley Guidelines monitoring schedule for blood pressure, weight (including waist size and BMI, if possible), fasting glucose, HDL cholesterol and triglycerides. Electronic patient records, paper notes and the laboratory results server were used in data collection.

Results – Overall, full compliance with baseline and annual checks was noted, with the exception of annual fasting glucose (80%). However, patchy screening was noted in the intervening period for all the parameters (less than 50%), apart from BMI estimation (100% compliance).

Discussion & Conclusion

As noted on perusal of available literature, few parameters were being screened in the UK and abroad. In more than 50% of cases, only blood pressure and triglycerides were being routinely monitored¹.

Current NICE Guidelines⁴ recognise metabolic risk secondary to antipsychotic prescription and recommend adequate screening of the parameters included in this audit. Both NICE⁴ and the Maudsley Guidelines recommend a monitoring schedule. The choice of the Maudsley schedule as the standard in this case was based on our current clinical practice.

It was observed that obtaining a fasting glucose sample may not always be practicable in our patient group. A non-fasting HbA_{1c} sample is a more accurate reflection of overall glycaemic control in the past 3 months. NICE currently recommends obtaining both parameters.

During data collection, it was noted that our current nutritional screening tool does not include waist circumference. This was not a mandatory requirement for this audit; however, it is recognised as a basic measurement which is independently associated with metabolic syndrome⁵. It is also noted that NICE currently recommends recording waist circumference alongside weight.

This baseline audit has helped us in recognising deficiencies in our practice and enabled us to develop a rigorous physical health protocol to ensure that the physical health standards for metabolic syndrome are met. We intend to re audit in 6 months' time to assess its effect on our subsequent practice.

References

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