

## When Do Psychiatrists Request Clozapine Serum Levels Assays? Audit of the Practice of Psychiatrists in 3 Hospitals in Manchester, UK

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### Introduction

Monitoring serum clozapine levels can be of great value in determining patient's concordance with treatment and detecting abnormal levels associated with increased serious side effects.

### Aims

To compare the current practice in ordering clozapine serum level assays with the local guidelines and to establish trends in requesting the test across the 3 hospitals.

### Methods

We reviewed the electronic notes of 105 patients who had 181 results over a period of 6 months to gather demographics, indications for clozapine assays and management after results.

### Results

In 44% (n=80) of cases there was no clear documentation of the reason for requesting the test. 70% (n=71) of the documented indications were in line with the local guidelines. The most common reason for testing clozapine levels was monitoring compliance (n=25, 24.8%), followed by side effects suggesting high serum levels (n=19, 18.8%). the third was smoking cessation (n=16, 15.8%). 30% of the documented indications were classed as 'other', where the indication was not stated in the guidelines.

43% of cases had abnormal levels (< 0.35 mg/l or >1.0mg/l), 26% had borderline levels (0.61-0.99mg/l) and 31% had levels within the recommended range (0.35-0.60mg/l).

A high degree of inconsistency was observed in the management of clozapine levels especially levels between 0.61-0.99mg/l and levels above 1.0mg/l.

### Conclusions

Monitoring compliance, side effects and smoking cessation were the most common reasons for requesting serum clozapine level assays. The observed inconsistency in managing borderline and abnormal results demonstrates the need for expert consensus guidelines on managing clozapine serum levels.