Antibody deficiency in patients taking clozapine

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Although clozapine reduces overall mortality in schizophrenia,1 a growing body of evidence links its use with higher rates of admission to hospital for pneumonia2-4 and mortality.5-8 Various mechanisms have been proposed for the rise in pneumonia, including sedation, sialorrhoea and aspiration, agranulocytosis, and smoking.9 10 Following the introduction of calculated globulin screening in Wales,11 we found a novel and striking association between use of the antipsychotic clozapine and antibody deficiency.12 Patients taking clozapine follow an intensive regimen of blood testing for the rare risk of agranulocytosis (with cumulative incidence of <1% cases), but antibody testing is not included in existing clozapine monitoring programmes. We urge consideration of this potential mechanistic explanation as a modifiable risk factor for the higher rates of pneumonia and sepsis related mortality reported in this vulnerable cohort.

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