

Can haloperidol cause serious neutropenia?

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Case report

According to literature; clozapine and remoxipride carry the highest risks of haemopoietic reactions appeared to be associated with the aliphatic phenothiazine derivatives thioridazine and chlorpromazine. There is therefore no evidence of any increased risk with high-potency drugs such as haloperidol or pimozide or with the newer drugs such as sulpiride or risperidone.¹ However, this case report revealed that haloperidol can cause serious neutropenia.

62 years old, Qatari male, known case of DM and HTN with no past history of mental illness presented on second of November 2015 with agitation, aggression and disorientation for the past one week. The patient was recently successfully treated from pleural effusion when fell from bed 2month ago and fractured his right rib. He injured his liver and diaphragm too. He got discharge from surgical department one week prior to his current admission.

On 2/11/2015, the patient was suffering from delirium.² And was started on regular haloperidol injection, 1 mg, twice daily, because he was refusing any per mouth medication. On the same day of arrival, his WBC was 13.000, Neutrophil 4.2. And we were waiting for cultures result, patient was on I.V fluids and haloperidol. Further investigation revealed Klebsilla pneumonia and UTI; antibiotics were given. During this time patient showed gradual improvement in cognitive functions and started to be oriented and was able to concentrate. Gradual drop in total WBC was observed. WBC reaches 1.7 and neutrophils .6 on 6/11/2015. He was on Nitrofurantoin and haloperidol. Our consultant stops haloperidol immediately and replaces it by olanzapine. Then the patient became much calmer and oriented. On 7/11/2015, hid total WBC became 2.8 and neutrophil 1.2. On 10/11/2015, total WBC remain 2.8 and neutrophil 1.4.

According to literature temporary leucopenia with a WBC of about 3.500 is a common but not serious problem. Agranulocytosis, a life threatening hematologic problem, occurs in about one in 10.000 persons treated with dopamine receptors antagonists. And the mortality rate should be as high as 30%.³

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Conflicts of interest

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References

1. King DJ, Wager E. Haematological safety of antipsychotic drugs. *J Psychopharmacol.* 1998;12(3):283–288.
2. DSM5: www.psychiatry.org
3. Benjamin J Sadock, Virginia A Sadock, Norman Sussman. *Psychiatric Drug Treatment.* (5th edn), Lippincott Williams and Wilkins. USA. 2011. p. 126.