

MONITORING MORE THAN LEUKOCYTE COUNT? — CLOZAPINE-INDUCED PANCYTOPENIA AND ACUTE FLARE UP OF VIRAL HEPATITIS

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Clozapine is one of the most effective atypical antipsychotics for schizophrenia. However, potentially life-threatening hematological adverse effects, such as leukopenia, agranulocytosis and even pancytopenia, warrant frequent and even life-long monitoring of leukocyte count.

A 40-year-old male HBV carrier, who has paranoid schizophrenia refractory to multiple pharmacotherapies, was admitted due to acute exacerbation of psychosis in 2013/04. We shifted to clozapine gradually, and partial remission was achieved in one month with no prominent hematological side effect. He was discharged with 250mg of clozapine per day. The leukocyte count was still within normal limits one month after discharge (WBC: 4320/ul). But then pancytopenia developed in another 3 weeks. He was thus re-admitted for adjusting pharmacotherapy. Stunningly, acute flare up of hepatitis was noted (GOT/GPT: 1221/1716 IU/L, viral load: 9.70E+5 IU/ml). Hepatologist was consulted and proved acute HBV flare-up and initiated antiviral therapy. Clozapine was initially tapered to 150mg per day, but pancytopenia kept worsening (WBC: 2540/ulr, Hb: 12.7 gm/dL, platelet 61000/ul). We thus shifted to paliperidone (9mg) after clozapine was washed out for one week. Pancytopenia and viral hepatitis improved in 2 weeks with no relapse of psychotic symptoms.

Close monitoring of leukocyte count is crucial in patient treated with clozapine. However, it may not be the only thing needs to be kept in mind. In our case, severe pancytopenia developed with subsequent acute flare-up of viral hepatitis, and each could be debilitating. More attention should be paid when treating patient with latent but potentially fatal infection such as HCV with clozapine.