

269 - Granulocyte colony stimulating factor

Granulocyte colony-stimulating factor

270 The Maudsley® Prescribing Guidelines in Psychiatry CHAPTER 1 Lithium does not protect against true clozapine-induced agranulocytosis. One case of fatal agranulocytosis has occurred with this combination²⁵ and a second case of agranulocytosis has been reported with the combination with subsequent resistant to treatment with granulocyte colony-stimulating factor (G-CSF).³⁷ Granulocyte colony-stimulating factor The use of G-CSF to facilitate uninterrupted clozapine therapy in patients with previous neutropenia is a strategy that is attracting increasing interest but is somewhat controversial. In one study, clozapine was successfully rechallenged using G-CSF in 76% of patients for an average follow-up period of 1.9 years.³⁸ As well as the commonly reported adverse effects of bone pain³⁹ and neutrophil dysplasia,⁴⁰ the administration of Treatment/rechallenge with clozapine considered desirable Discontinue, if possible, other drugs that are known to suppress the bone marrow Genetic testing/refer to haematologist for BEN dx if appropriate Baseline U&Es, TFTs, FBC Borderline/ low WCC WCC in right range Prescribe lithium 400mg daily Titrate dose to achieve a plasma level

“ 0.4mmol/L (higher plasma levels may be appropriate for patients who have an affective component to their illness). Repeat WCC If WCC result is in the normal range, start/restart clozapine Ensure ongoing monitoring for clozapine and lithium (note that lithium does not protect against agranulocytosis: if the WCC continues to fall despite lithium treatment, consideration should be given to discontinuing clozapine. Particular vigilance is required in high-risk patients during the first 18 weeks of treatment) Lithium contraindicated or inappropriate Haematology referral/ consultation with clozapine registry Unlicensed US monitoring criteria Treatment plan with G-CSF Figure 1.6 The use of lithium with clozapine.

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