

## LORATADINE AND GRANULOCYTOPENIA

Classical antihistamines, notably mebhydrolin and chlorphenamine, are well-known causes of agranulocytosis. This general rule does not apply, however, to new antihistamines such as loratadine. Granulocytopenia is not a recognised side effect in the SPC of loratadine (Claritin<sup>R</sup>).

In The Uppsala Monitoring Centre's data base there are now five cases of granulocytopenia, suspected to be induced by loratadine. Some details are listed in table 2.

Table 2 - Five case reports of granulocytopenia during the use of loratadine

<u>Preferred terms</u>	<u>Other suspected drugs</u>	<u>Outcome</u>
agranulocytosis	almitrine/raubasine, fluvoxamine, furosemide, nicergoline, sotalol	recovered
neutropenia	-	recovered
granulocytopenia, fever	-	unknown
neutropenia, leucopenia, epistaxis, prothrombin decreased, fibrinogen decreased	-	unknown
neutropenia	-	recovered
neutropenia	carbamazepine, furosemide, acebutolol, nicardipine	not yet recovered

In two of the five reports the selected terms suggest clinical agranulocytosis. In the remaining three cases apparently there was only a decreased number of neutrophil granulocytes. In two reports there were other simultaneously suspected drugs, e.g. carbamazepine (a very plausible explanation) or furosemide. In conclusion, the data suggest that the use of loratadine may be associated with the development of granulocytopenia of varying severity.

### **Epoprostenol and thrombocytopenia**

Epoprostenol or prostacycline may be used in the treatment of pulmonary hypertension. It is not known to cause haematological reactions. However, nine recent case reports to the Uppsala Monitoring Centre, all from the USA, suggest that the use of poprostenol may elicit the development of thrombocytopenia. In all reports epoprostenol was the only suspected drug. In two patients thrombocytopenia was associated with bleeding: epistaxis and melaena together with a rectal haemorrhage in one patient - the age of 3 years in this patient is expected to be an administrative error - and a fatal subarchanoid haemorrhage in the other. Another of these nine patients died from a cardiac arrest suspected to be drug related.

### **Methylphenidate and granulocytopenia**

Methylphenidate is an amphetamine like drug used in narcolepsia and childhood hyperkinetic syndrome. It is not known to cause haematological reactions.

The Uppsala Monitoring Centre has received a total of 11 case reports of granulocytopenia or neutropenia, including two cases of agranulocytosis. One patient simultaneously had arthralgia, another had thrombocytopenia. It is noteworthy that although methylphenidate is an old drug, all but one of these cases were reported in recent years.

Eight reports came from the UK, the remaining three from Ireland, Germany and the USA respectively. Ten reports concerned children, age ranging from 6 to 16 years. No other use of drugs was mentioned in any of the reports.

In conclusion, these reports suggest that methylphenidate may cause decreases in the number of granulocytes and even agranulocytosis.