

Change in Advice on Administering Mercaptopurine (also known as 6MP and 6- mercaptopurine)

Families who find night-time dosing of mercaptopurine on an empty stomach difficult can now choose the time of day which is most suitable for ensuring mercaptopurine is taken regularly. If taken with food it should always be taken with food and if on an empty stomach, always on an empty stomach. The mercaptopurine dose will be adjusted according to blood count results as is current routine practice. The critical action for patients and families is to remember to take mercaptopurine regularly as prescribed.

For many years, oncologists have been advising patients and families to administer mercaptopurine at night on an empty stomach. This advice was consistent with both treatment protocols and international best practice that suggested mercaptopurine is better and more predictably absorbed from a stomach with no food in it. In particular, it was based on a Scandinavian study from the 1970s which showed that those patients who received their mercaptopurine at night had better survival than those who received it in the morning.

There has been substantial change in both treatment and survival since that time. Among these changes has been a strategy to adjust mercaptopurine dose according to the blood count results. This means that while everyone starts on the same protocol determined dose, the prescription of mercaptopurine for every individual patient changes according to the effect it is having on the bone marrow and by implication, any persisting leukaemia cells.

Individualizing mercaptopurine dose may counter the effect of the timing of mercaptopurine dosing. The Children's Oncology Group (COG) has just released data showing that there is no longer any significant difference in outcome between those whose mercaptopurine is taken in the morning or at night or with and without food. However it advises that mercaptopurine needs to be taken at the same time each day and consistently either with or without food so that the dose can be adjusted accurately according to the blood count results.

The new instruction for those patients who have difficulty with night time dosing on an empty stomach is to find a time which best suits their family routine and enables them to ensure dosing at the same time each day and to take it consistently either with or without food.

The COG protocols are being changed to reflect this new information and the NCCN family medicine information has already been altered.

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